

## Evaluation in Distance Education and Its Challenges: The Active Methodologies in the Teaching-Learning Process

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**Abstract:** This paper presents a didactic experience in the discipline (curricular unit) entitled Distance Education offered by the Postgraduate Program in Technology and Management in Distance Education at the Federal Rural University of Pernambuco (UFRPE). The main activity taught in this curricular unit was the development of a short course in which it sought to analyze the importance and challenges of evaluation in distance education.

The main objectives were to discuss the various possible ways of assessing learning in the distance education modality and to analyze the assessment tools that can be used in virtual environments. For this purpose, a survey of evaluation methodologies was carried out, emphasizing the need to innovate and seek alternatives that stand out to contribute to meaningful learning. It was observed that in distance learning there are some studies that highlight innovative methodologies. As examples, there are active methodologies that are already a reality in distance education. At the end of this didactic experience, it was concluded that evaluating requires a break of paradigms, because in distance education, evaluation is a dynamic process that has undergone constant changes since the emergence of digital Information and Communication Technologies (TDIC).

**Key words:** evaluation, distance education, learning assessment tools, active methodologies

### 1. Introduction

In the educational field, evaluation is still a paradigm, considering that there are many challenges to be overcome by most teachers, due to the existence of theories that present confrontations with the diversity of their contexts of application.

Evaluation is still a topic that sparks several debates, both in the face-to-face and in the distance mode. In distance learning, as it could not be otherwise, the theme related to issues related to assessment in pedagogical

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practices, as well as the assessment tools used in virtual learning environments, has been widely debated.

Such assessment instruments: test, research work, questionnaire and seminar, have been used for several decades with the aim of just measuring a grade, aiming at a result of the student's approval or disapproval. In this scenario, the study of evaluation in the teaching-learning process has an important contribution to the formulation of the teacher's planning, because as the results are obtained, we can verify and analyze whether the learning objectives and goals have been achieved. With these results, we can reconsider the decisions made and reevaluate school planning.

According to Moran (2000), Distance Education (DE) can be conceptualized as the teaching-learning process in which teachers and students are spatially and/or temporally separated, but can be connected by several technologies that are in charge of facilitating this mediation.

In the construction of the evaluation practice, the teacher needs to contemplate in his teaching plan the three evaluation modalities: diagnosis; continuous or formative and final or summative, in order to reflect on new potentialities that can be explored with the emergence of Digital Information and Communication Technologies (TDIC).

For Libâneo (1994, p. 195)

Assessment is a complex task that is not limited to taking tests and grading. The measurement only provides data that must be subjected to a qualitative assessment. The evaluation thus fulfills pedagogical-didactic, diagnostic and control functions in relation to which, instruments of verification of school performance are used.

Based on the principle that the teacher has a fundamental role in the construction of knowledge, according to Freire (1996, p. 21), "Educating is not transferring knowledge".

In distance education, the evaluation methods used still require reflections on teaching practice since the virtual classroom has its peculiarities, thus increasing the range of possibilities for the use of various tools to evaluate students and why not tell teachers as well.

According Luckesi (2001, p. 174):

The evaluation of learning at school has two objectives: to assist the student in his personal development process, based on the teaching-learning process, and to respond to society for the quality of the educational work carried out.

In this context, an academic activity was carried out in the discipline (curricular unit) of distance education in the Post-Graduate Program in Technology and Management in Distance Education at UFRPE, in the first semester of 2018. This activity consisted of the realization, by the students, of a task, that is, the creation of a virtual room in the virtual Moodle environment, structuring all the stages, from the construction, presentation of the didactic content, as well as the evaluation with the feed-back by the students who, in this case, were the others classmates who participated, as a student, in the virtual room performing the activities requested in the mini-course.

The central theme of the short course of that work was "Assessment in Distance Learning and its Challenges", and as a student, each student participated in two short courses aiming at forming a broad vision of how the role, both of the teacher and student requires knowledge of Digital Information and Communication Technologies (TDIC).

In order to work on the concepts of Assessment in Distance Education, a research was carried out using some available literature, such as articles in journals, books, videos, etc., with the objective of supporting the

pedagogical practices of assessment used in virtual learning environments.

## 2. General Objective

This research aimed to investigate the types of assessment in the virtual learning environment based on the use of active teaching-learning methodologies.

## 3. Theoretical Framework

Recent studies have shown that the use of active teaching-learning methodologies can generate innovative practices that enable a revision of traditional models, causing a change in the protagonism of the teaching-learning process, passing from the teacher to the student (Diesel et al., p. 270).

The traditional method, in which the apprentice assumes the role of receiver of theories, concepts and formulas, and the teacher as the main figure, with the active teaching-learning methodologies, proposes a reverse movement, in which the students assume a participatory role, by being protagonists in the construction of knowledge.

The active methodology is based on encouraging students to overcome challenges, bring new ideas, power of argument in debates; becoming actors in the knowledge construction process.

In this sense, methodologies have been implemented through project-based learning (Project Based Learning (PBL)), game-based learning (Game Based Learning (GBL)), case method or discussion and solution of cases (teaching case) and learning in team-based learning (TBL). For Staker and Horn (2012) the use of TDIC in the classroom, contributed to the development of active methodologies combining activities carried out online through these technologies and face-to-face activities, known as blended learning or hybrid teaching.

At the end of the 1960s, the problem-based methodology emerged with the objective of focusing on the student, who, through a specific theme together with experiences in problem solving, encourages the student to "think-do", to appropriate of knowledge.

Another active methodology that has been studied is the inverted classroom or flipped classroom, in which the teacher brings a theme in which students build their research and in the next class in a large group this material is socialized and with the guidance of the teacher. builds knowledge.

Active methodologies such as pedagogical strategies enable the creation of teaching opportunities in which students start to be more active behavior, involving them in a way that they are more engaged, carrying out activities that can help the establishment of relationships with the context, the development of cognitive strategies and the process of knowledge construction.

For Silva (2006, p. 23):

The assessment of learning in the online classroom requires a break from the traditional assessment model historically crystallized in the classroom. If the teacher does not want to underutilize the potential of digital online, or if he does not want to repeat the same mistakes of traditional assessment, he will have to look for new attitudes, new engagement strategies in the context of teaching and learning and then resize his teaching assess learning and his own performance.

According to Hoffmann (2001, p. 89):

The assessment dynamics are complex, as it is necessary to follow the individual learning paths that take place in the collective. Thus, the teacher must continuously evaluate, but the nature of his intervention will be

different at each moment of the process.

In this sense, the act of evaluating in the educational field needs to be very clear in the planning prepared by the teacher, because in the virtual environment the evaluation process is composed of several authors, students, tutors and teachers, and each of these actors needs to perform their role efficiently, so that the results are effective, reaching the planned objectives and goals.

The concept of evaluation is understood in a diagnostic, formative and summative perspective, as the practice that seeks to understand, improve, qualify and quantify the teaching and learning processes, assigning them peculiar meanings and guiding the making of new decisions, whether in face-to-face or in virtual education (Rodrigues, 2002; Saul, 2001).

Following this concept of evaluation, we need to understand what a diagnostic, formative and summative or final evaluation is:

- Diagnostic Assessment is the set of information obtained at the beginning of the process in order to build a student's prognosis in relation to the previous knowledge he has before taking a distance course.
- Formative Assessment aims to monitor the student's development throughout the teaching-learning process according to the resolution of the activities requested by the teacher.
- Summative or Final Evaluation is the way to evaluate the student at the end of the course, when the teacher checks whether the objectives have been achieved or not, depending on the result of collective learning.

Therefore, it is understood that:

Assessment is a multi-faceted process, including the affective and social aspects involved in learning. Therefore, we believe that the evaluation cannot be conducted only electronically. Regardless of the adopted learning environment, that is, the classroom or computational environment, student assessment is a task for the teacher (Campos et al., 2003, p. 124).

In this research it is understood that the active methodologies and their strategies occur and can be leveraged in a context of meaningful learning. In this regard, Ausubel (1973) explains that meaningful learning is the process by which new knowledge is related in a non-arbitrary and non-literal way to the student's cognitive structure, so that the student's prior knowledge interacts, in a significant way, with the new knowledge presented to him, causing changes in his cognitive structure. Thus, it is believed that the exposure of students to innovative teaching-learning methodologies, in addition to the tools of digital technologies of communication and information, TDIC, contribute to the improvement of the teaching-learning process.

#### **4. Methodological Procedures**

This research had a qualitative approach since it is understood according to Richardson et al. (2015):

Qualitative research can be characterized as an attempt to a detailed understanding of the meanings and situational characteristics presented by the interviewees, instead of producing quantitative measures of characteristics or behaviors (Richardson, 2015, p. 90).

As for the objectives, this research is characterized as a descriptive one, because according to Perovano (2014), the descriptive research aims at the identification, registration and analysis of the variables that are related to the studied phenomenon.

As for the technical procedures, this is a bibliographic and documentary research, since periodical articles and other sources were used for the construction of the theoretical framework.

With the advancement of TDIC, more and more active methodologies have been experienced in the virtual learning environment (VLE), being present in the various stages of evaluation. It is known that the human being has natural knowledge, therefore, it is necessary to make a diagnosis as a starting point to build the evaluation process.

The study of EaD evaluative processes based on active teaching-learning methodologies, as an activity of the curricular unit (UC) "Distance Education", was carried out from the elaboration and realization of a mini-course, elaborated for this UC, of the Program Graduate Program (Professional Master's) in Technology and Management in Distance Education/UFRPE. In this curricular unit, distance education, there were 20 students and 9 short courses were prepared. Each student should participate in 3 mini-courses, as a student, in addition to exercising the role of teacher in the course he designed, individually or as a team.

The teachers of the curricular unit in question, distance education, advised on the construction of the virtual classroom, through examples such as: recording a video of the mini-course presentation; availability of didactic content (articles, books, videos, audios, websites, handouts, among others). And also the creation of a virtual forum for news and a forum for questions, chats, evaluative activities and also a survey requesting feedback from students on the opinion regarding the mini-course.

The theme of the course designed for the curricular unit, distance education, was evaluation in Distance Education and its challenges, with a 6-hour workload. The virtual learning environment was structured based on active methodologies addressing the concepts of evaluation, in a way that the student of the curricular unit of distance education, as a teacher, assumed the role of mediator in the process of building learning and the other students acted as protagonists of the actions to achieve the planned objectives.

Considering the need to move forward with changes in the organization of the classroom in the moodle (virtual learning environment), with the active methodologies, the virtual environment was structured by applying the technological resources available in the virtual environment used (Moodle), for the development of a project, in which students would research the content of a given subject through internet searches and in another stage of the project these concepts would be socialized in the discussion forums.

In the teaching-learning process supported by the active methodologies, the inverted classroom strategy was used, in which the teachers of the curricular unit, distance education, provided all material for students to prepare the mini-course according to specific themes. In this research, the theme was the evaluation of the teaching-learning process, as it is understood that the teaching-learning process occurs in a meaningful learning context and mainly happens in collective interaction. Teamwork was prioritized, with synchronous and asynchronous tools such as chats and forums.

## **5. Results and Discussion**

This research brings the experience shared in a professional master's course in Technology and Management in Distance Education at UFRPE in which students enrolled in the Distance Education course, obtained concepts related to the new digital information and communication technologies (TDIC).

In this context, several activities were developed related to each theme defined by the teachers of that curricular unit, in which each virtual classroom should have some elements, such as: a presentation video; creation

of news forum; course content (book, booklet, articles and study guide), questions forum, summative activity, online assessment and student feedback.

In the specific case of this research, the author had to develop a project on the theme: “Evaluation and its challenges in distance education”, and participated as a student in two courses entitled: “Learning in distance education” and “Planning and management in distance education”.

Considering that at both times the students were the protagonist of the activities to be carried out, it is clear that in the development of the experience, there was a great connectivity between the roles of teacher and student, demonstrating the importance of the mediation of the teacher with the students as a condition meaningful learning.

After participating both as a teacher in the virtual classroom and as a student in the virtual classroom of colleagues (these as teachers), a debate was held with the large group, in which each participant could present their experiences from the concrete construction of the project. requested, and also the elaboration of an account of his experience comparing the two moments, sometimes teacher, sometimes student.

It should be noted that the two moments were worked in an interconnected way and that the participation of the students was quite dynamic, with students interacting with the teacher, using the synchronous and asynchronous tools, clarifying the doubts that arose during the activities.

At the end of the experience, it was noticed that everyone was quite aware of the responsibility of both roles, both as a teacher and as a student, in distance learning.

## 6. Final Considerations

It can be said that the practice of evaluating is not an easy task, but rather a complex one, since it is related to the various axes in the teaching-learning process. In addition, in the distance education modality, the responsibility of the teacher is even greater, since many activities are carried out in asynchronous ways.

It is necessary to understand that the knowledge about evaluation, especially in distance education, still finds some resistance in relation to the breaking of paradigms, although there are several debates regarding the use of new technologies in education, because until then, it is perceived that one of the contributing factors is the lack of knowledge on how to correctly insert these tools into the teaching-learning process.

The practice of evaluating in distance education has been improving more and more, with changes in distance learning and it is emphasized that the learning process, planning must be based on a creative, innovative and inclusive dynamic, ensuring with this new paradigm the use of procedural, dialogic, formative and summative assessment.

Therefore, it is necessary to dialogue, monitor the learning difficulties of each student, so that the construction of knowledge happens in a collective and participatory process, collaborating for a non-punitive and non-exclusive evaluation system, in which the student can participate in the process of knowledge construction, as a critical and transformative being and as a decision maker in society.

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