LUMEN ET VIRTUS
ISSN: 2177-2789

THE USE OF TECHNOLOGICAL RESOURCES AS AN EVALUATION TOOL: VIEWS OF HOW APPS CAN HELP THE EVALUATION PROCESS OF SCIENCE TEACHING, A STUDY CARRIED OUT AT THE PROFESSORA TEREZA SIQUEIRA TUPINAMBÁ SCHOOL, MANAUS-AM/BR, IN THE PERIOD 2023-2024[1]

https://doi.org/10.56238/levv15n43-107

Submitted on: 23/11/2024 **Publication date:** 23/12/2024

Almir Sampaio de Moura[2]

ABSTRACT

This work is a research that aimed to investigate how the use of educational applications contribute to improve the performance in the evaluations of students in the 9th grade of elementary school at the teacher Tereza Siqueira Tupinambá school Manaus-AM/Brazil. To reach the questions previously evidenced by the researcher, this investigation had the following specific objectives: To investigate the different concepts and thoughts that permeate the understanding of teachers and their pedagogical practices about the evaluation of student learning, to conceptualize the evaluation, characterizing some approaches that are inserted in the teaching/learning process, and to point out how the use of educational applications, as well as innovative methodologies enable the teacher to have a better evaluation tool. The type of research carried out was exploratory, descriptive and had a qualitative and quantitative focus, the professors who teach the discipline of science and 120 students from the 9th grade participated in the research. The descriptors that support this research were authors with renowned research that deal with the historicity of the teacher training process, as well as the evaluation process and system, and authors who investigate the advancement in the educational technological process. Data collection took place between 2023 and 2024. The results found refer to a broad discussion with the aim of improving the operational aspects for the good development of the teaching work in the perspective of offering the population a quality education based on the use of computerized educational tools.

Keywords: Education. Technological Tools. Evaluation.

[1] Article extracted from the Master's dissertation presented to the Faculty of Postgrad Maestría en Ciências de la Educación em la Universidad de la Integración de las Américas – UNIDA, Located in Cidad del Este - Paraguay, to obtain the title of Master in Science of Education in the year 2024

[2] Professor Graduated in Full Degree in Pedagogy from the Leonardo da Vinci University Center in 2014
Master in Educational Science from the Universidad de La Integración de Las Américas – UNIDA/PY in 2024
Doctorate student in Educational Science at the Universidad De La Integración De Las Américas – UNIDA/PY

INTRODUCTION

This research begins by observing that education poses many challenges to those involved. Much has been researched, written and discussed about education, but its theme has always remained current and indispensable because its main focus is people. Thinking about education means thinking about people as a whole. The assessment of learning in everyday classrooms has taken an important place and this research relates to our personal and professional experiences and aims to deepen academic knowledge on issues related to teaching, learning and assessment practices in schools, especially how teachers approach assessment issues in the classroom.

In the work as a teacher, there is ambiguity in the use and adoption of the term evaluation in school environments: sometimes evaluation refers to the mastery of content, sometimes it is simply a measurement tool, and sometimes it appears as, among other things, a form of punishment sometimes used as a prerogative of those in power. In this perspective, this master's thesis discusses the theory and practice of the educational evaluation process, bringing as a propeller of a new horizon the application of educational applications in the face of innovative methodologies

Evaluation has existed throughout human history and has often been used as a form of control and authoritarianism for generations; evaluation increases this value and translates it into true beliefs. Through this argument, we want to underline that the idea of evaluation is a social construction and, therefore, related to the historical, emotional, economic, cultural, social and ideological conditions of the people who evoke or apply it. Closely related to the values established and experienced by practitioners.

As it is known, the path of transmission of knowledge is a process that goes through several stages in our daily lives, this process is continuous and requires several ways, techniques and procedures to successfully achieve the final goal, where it is presented through evaluations that aim to measure the learning of an individual, in this evaluation process teachers have found it very difficult to express in numbers the real knowledge acquired by students in the teaching-learning process. In this sense, technological innovations can be a great ally in stimulating teachers and students.

In this sense, the problem situation of the research arose when it was observed in the school teacher Tereza Siqueira Tupinambá Manaus-AM/BR, a tension among the teachers, because they feel unprepared to develop activities that involve innovative methodologies, especially when it comes to ICTs, in this sense the concern arose about how the teachers would be developing their respective evaluation processes, since these professionals always brought to light the discussion that students did not do well in the

"traditional" assessments. The general objective of the investigation was: To demonstrate how the use of educational applications contribute to improving the performance in the evaluations of students in the 9th grade of elementary school at the teacher Tereza Siqueira Tupinambá school Manaus-AM/Brazil, from February to June 2023.

This investigation is justified by the need to find mechanisms that enable teachers to have innovative means of evaluation, so educational applications are presented as a possibility of motivation for students to feel more attracted in carrying out their activities with more interest in achieving success and awakens in students a new look at the digital world. After the questions raised, the premise is that if the students find it difficult to expose in the form of traditional formal evaluation what they learned during the classes, where various content was taught.

As a consequence of the investigation, it sought to show that the correct use of educational applications can provide teachers with an innovative tool that will assist in the educational evaluation process, at the same time that students will feel more motivated in carrying out their evaluation activities.

BETWEEN THEORY AND PRACTICE: CONCEPTS ABOUT EVALUATION ON THE TRAIL OF HISTORY FROM THE BEGINNINGS TO THE PRESENT DAY

Education is a social practice present in different human cultures in which we find evaluation as a tool for organizing and selecting individuals in all spaces. From this perspective, evaluation can be seen as a selection strategy for a certain purpose. Perrenoud (1999) says that evaluation is an invention originating in schools, and emerged in the eighteenth century and, however, it was from the nineteenth century, when schooling became compulsory, that it was implemented. "La Salle, in 1720, in the Guide to Christian Schools, proposes the exam as a permanent supervision of teaching, but in a dimension of control." (GARCIA, 2013, p. 40).

However, it should be noted that the propositions of the educational exam are based on the research of Comenius, founder of modern teaching methods and one of the greatest educators of the seventeenth century. In 1657, Comenius classified exams as tools for feedback on the educational process and necessary for the teaching process in his book "his Didactica Magna[3]". Later, the Jesuits developed a model of evaluation of a competitive and quantitative nature, a teaching technique used by the Jesuit company and which still prevails today among the followers of traditional pedagogy. With the institutionalization of modern schools, school evaluation (i.e., the assignment of grades for correction in exams)

[3] A book published in 1627, which presents the fundamental characteristics of the modern school.

became a central feature of schools and, with it, the hierarchical organization of students according to individual performance.

This form of evaluation, already used in Europe and the United States during the nineteenth century, creates the false impression that evaluation instruments are neutral and that their use can lead to nepotism about individual abilities. It is worth noting the importance, in this context, of the emergence of the exam called 'baccalauréat' created in 1808 by Napoleon Bonaparte and aimed at the certification of secondary education and access to University. This exam was the basis for the subsequent institutionalization of written exams, with characteristics of quantitative evaluation, as well as the issuance of certification or diploma, conferred on those who performed it with proficiency.

According to the proclaimed ideals that marked the emergence of the 'baccalaureate', education would be focused on the formation of people destined to occupy the new functions that the public system began to require, and for the supply of which it was intended that only personal merits be considered (ALVES, 2018). However, with the bourgeois ideals of citizenship propagated in France, there was a reconfiguration associated with the alleged guarantee that exams and intellectual measurement tests were neutral and objective, allowing a fair classification of people. The Industrial Revolution also stamped this thinking on the issue of evaluation: "The hierarchical model of jobs used in industries gives clues on how to organize classes in schools, in the same way that school evaluation is reinforced as an instrument for the selection of the best students and the referral of the others according to their capacities". (PESSANHA, 2016, p.67).

The circulation of these ideas and perspectives will lead to the development, by Robert Thorndike, in the first decades of the twentieth century, of standardized educational tests, whose main objective was to measure students' behaviors, skills and aptitudes, so that the school would function as a company (SAUL, 2014). The diffusion of neutrality and objectivity of tests and exams, however, continues, even though growing questions are being heard. "Little by little it is becoming clear that the act of judgment is permeated by elements from the social and school context". (HADJI, 2015, p.90).

This evaluative perspective continues to spread, reinforcing that the main objective of evaluation would be to identify, through exams, the successes and mistakes of students, and it is up to specialized educators to create appropriate instruments for this purpose. Also in pursuit of this objective, Ralph Tyler, an educator who is credited with the pioneering use of the terminology 'learning assessment', developed, in 1942, an evaluative model linking

objectives and evaluation[4]. Also in pursuit of this objective, Ralph Tyler, an educator who is credited with the pioneering use of the terminology 'learning assessment', developed, in 1942, an evaluative model linking objectives and evaluation. This American researcher, the first to introduce the concept of educational objectives, defines that the focus of his investigation would be to verify how much these objectives were achieved, through the achievement of pedagogical practices designed and carried out for this purpose. The so-called conductist theories are based on this model, starting to use its concepts in the elaboration of objectives, since these made it possible to describe observable behaviors, which could be measured with evaluation (DEPRESBITERIS, 2015).

At the end of the 1940s, a group of scholars from the University of Chicago, under the sponsorship of the American Psychological Association and the leadership of Benjamin Bloom, developed the idea that evaluation, in order to be reliable, should be carried out with the support of objectives described in behavioral terms, as well as by describing the situations in which they could be observed. With this study, they intended to create a "classification of objectives of educational processes". Together with his colleagues, Bloom proposes a division of educational goals into three areas: cognitive, affective, and psychomotor.

In the 60s, for the first time, the distinction between formative assessment and summative assessment was made, in an effort to overcome attitudes that, until then, considered only the issue of measurement, presupposing learning as a sum of parts and not as a synthesis or integral. It is noteworthy that the existing evaluation models suffered the significant weight of the North American influence. At the beginning of the twentieth century, the diastasis of educational tests developed by Robert Thorndike emerged in the United States, rescuing the value of measuring changes in people's behavior.

From this perspective, it can be said that evaluation is an arduous task, but necessary and permanent in the teaching work, and the results achieved by the joint effort of teachers and students must be monitored step by step and compared with the proposed goals to verify not only the progress but also the difficulties, and redirect the work to the necessary corrections. The Law of Guidelines and Bases is the highest law of education. Through it, it defines the guiding thread of the general order of education in Brazil, having as one of its fundamental principles the equality of conditions of entry and attendance in schools, a principle derived from the Federal Constitution of 1988, which states that

[4] The study in which Tyler proposes his model included a variety of evaluative procedures, such as tests, attitude scales, inventories, questionnaires, check lists and other measurement strategies, whose application aimed to collect evidence on the performance of students, following them throughout their schooling, in a longitudinal perspective and always considering the evolution of curricular objectives

everyone has the right to education, regardless of skin color, sex, race, age, physical condition, and so on.

In this historical context, the Brazilian laws of Educational Guidelines were enacted, from the first law of 1961 to the current law (Law No. 9,394 of 1996), and even Law No. 5,692 of 1971, during the dictatorship. They were configured as regulators of education, sometimes making constitutional recommendations and even reissuing the constitutional text, characterized by monumental, albeit small, progress in the organization of national education. According to the current Law of Guidelines and Bases of National Education No. 9,394/96, the evaluation is contemplated in Article 24, item V, where it is said that the verification of school performance will observe the criteria specified in the aforementioned article.

Therefore, the evaluation is a reflection of the level of quality of the school work of both teachers and students. In school evaluation, what is evaluated is not a specific observable object, but a continuous human process. On the other hand, to overcome this problem, avoid hasty evaluations and prevent temporary evaluation from becoming generalized to the entire process, continuous evaluation must be carried out to capture all aspects of student development.

THE USE OF TECHNOLOGICAL RESOURCES AS A TOOL IN THE CLASSROOM

The use of digital technological resources in school environments is a work that needs to be strengthened, as there is a considerable gap between technological advances in the production of free or proprietary educational applications and the acceptance, understanding and use of these resources in the classroom by teachers. The National Curriculum Parameters (BRASIL, 1998) already emphasize the importance of technological resources for education, aiming to improve the quality of teaching and learning. They affirm that informatics in education "allows the creation of learning environments that suggest new ways of thinking and learning" (p. 147).

Currently, the use of digital technology resources in school environments is an area of work that needs to be strengthened, as there is a considerable distance between technological advances and their application in the classroom. The discussion on the use of technologies as an educational tool is broad and presents several authors who will also be presented and discussed in the course of this research.

In this sense, corroborating what was exposed, SILVA, OLIVEIRA and SALES, 2018, p.780, points out that:

> Despite the exponential growth of research on gamification, its application in the classroom as an active learning strategy is still a major challenge for education. One of the difficulties encountered is the lack of adequate tools that can automate the immediate feedback system and allow for gamified learning experiences. In this sense, the objective of this article is to describe the contributions of Canhota to facilitate the process of gamification in the classroom. (SILVA, OLIVEIRA AND SALES 2018 p.780).

The National Curriculum Parameters (BRASIL, 1998) already emphasize the importance of technological resources for education, aiming to improve the quality of teaching and learning. The use of new technologies, especially those of communication and interaction (ICT), has caused the restructuring of the traditional teaching method. D'Ambrosio (1986) drew attention to the fact that, in many cases, students are more accustomed to the use of technologies such as computers and software than teachers themselves, since children and young people have recently used these technologies in games

As teaching comes to be understood as a process, it can be said that evaluation does not begin or end in the classroom. It is a complex situation, which actualizes in itself memories, meanings and diverse interests. For the teacher, evaluation is still one of the most difficult tasks, but also an indication of his strength and power. The evaluation of learning in the daily life of the classrooms has occupied a place of great relevance and this study is linked to our personal and professional experiences and with the intention of deepening our academic knowledge, allowing us to understand the issues related to teaching, learning and evaluation in the daily practice of the school, especially how the issues of evaluation are addressed within the classroom by the teachers

Working with technologies in the classroom is of paramount importance, not only to improve the qualification of teachers, but so that these technologies can reach all students, giving them a new horizon in terms of improving teaching in schools, CARVALHO, 2018, p. 16, tells us that:

> The accelerated renewal of technological means has been limited only to the training of teachers for their use. In view of the changes arising from the growing technological development, it is necessary in education to build new pedagogical conceptions elaborated under the influence of the use of new technological resources that result in practices that promote the curriculum in its various fields of the educational system, enabling teachers to critically appropriate these technologies and educational practices, contributing to digital inclusion and giving significant emphasis to pedagogical practice.

The use of technologies in the classroom has been a solution every day to improve the teaching process in classrooms, both in the public and private networks, in this sense: SILVA, 2017, p. 230 explains that:

> The use of technological resources in the classroom has been constantly discussed, since technological tools are presented as a new method of aid in teaching, the use of such is necessary in the school environment. The use of these texts provides students with a greater understanding of the chemistry contents so that they minimize their difficulties. This research proposes the use of technological resources, such as the use of educational software to aid the teaching of chemistry. Observing that there is a lack of didactic support during the classes taught by the teacher, the use of such tools favors new forms in the teaching-learning process. (SILVA, 2017 p.230)

The use of new technologies, especially those of communication and interaction (ICT), has caused the restructuring of the traditional teaching method, called by (Freire, 1987) the "banking conception of education". In this conception, the teacher is the central figure of learning, and it is up to the student to assimilate, passively and without considering his learning pace, all the content exposed on the blackboard

The reality of which Brazilian public education seems to be part today condemns the lack of certain conditions for the implementation of educational policies and the unpreparedness of both educators and students, of whom technological progress is an evident factor, that is, what has been experienced in the technological field in recent years. than the capacity of the individual, willing to accompany him. As technological resources enter schools, educators need to adopt new attitudes towards teaching practices. Understanding new ways of learning, teaching, producing, communicating and reconstructing knowledge is essential to form more qualified citizens, who act and live in society, are aware of their commitments, express their creativity and change their environment. In this sense, Quaresma (2015) points out that despite the Science of

Computing has developed technologies that allow technological inclusion in the classroom, education suffers from the fact that it has not kept up with technological advances. The use of technology as a teaching tool in the classroom needs to be based on carefully planned teaching proposals and concepts that allow the application of innovative technologies that enhance the teaching process and make the classroom more dynamic, interactive and contextual to the student reality.

METHODOLOGICAL PATH

The present research was carried out at the state school professor Tereza Siqueira Tupinambá Manaus-AM/BR from February to June 2023. The school was built from the need to serve the community that for a long time dreamed of a school unit that contemplated the desires of the local society. The unit is located at Avenida Nepal QD 98, S/N Conj. Nova Cidade, neighborhood: Nova Cidade CEP: 69.097-315 Manaus – AM/BR, registered under INEP Code: 13131206.

The research is developed in three stages, which allow for a structured progression of the investigation. Each stage is divided into moments.

Stage 1: Structuring of the research with the objective of deepening the theory of the theme under study; divided into two moments:

The first moment involves bibliographic review and documentary analysis. For this work, the paths that the school evaluation process has taken to reach the present day were analyzed, it was also sought to understand how the BNCC and the PCN's guide teachers regarding the evaluation process. The objective of this documentary research is to find a theoretical framework to support the research, as well as to read and understand it based on bibliographic investigations, salient issues can be better understood and consciously placed in front of the object of study. The main characteristic of bibliographic research is the collection of data and information in electronic media, books, periodicals, theses and dissertations, which are available in the most diverse public and private archives and physical and virtual libraries.

The second moment was to seek authorization from the competent sectors so that the research could be developed, in this sense the direction and the pedagogical team of the school were sought, once authorized, we invited the teachers who teach in the classes that were investigated. In order to comply with research ethics, each subject received a cover letter (Appendix 2) and a free and informed Consent Form (Appendix 3). The term provides more information about the research and its purpose, and clarifies the ethical precautions to which the researcher is committed, such as the confidentiality of the information and its use only for research purposes and the anonymity of the subjects.

Stage 2: Field research was conducted, which was divided into moments. The first was intended for the elaboration of questionnaires that were applied to teachers and students, in the next moment it was intended to make the teachers feel free so that they could teach a class with the content at their discretion and then it was asked that the teachers apply a test as they would do in their daily lives to evaluate the students' learning to have an initial overview so that it could be compared with the next evaluation.

In the next moment, teachers were offered a workshop that aimed to present some educational tools as well as the educational applications called YOUTUBE, VLE and KAHOOT, the objective of the workshop was to demonstrate how the use of educational applications can motivate students to improve their performance when making an assessment.

In the next moment, the application was presented to the students and asked to download it on their respective cell phones and the guidelines for the operation of this

application were also given. After some demonstrations, the students were guided to study the same content that had previously been taught by their respective teachers and the next day a new evaluation was carried out already using the application.

Stage 3: The third stage was aimed at tabulating the data, interpreting and discussing. After tabulating the data, they were transcribed and are presented in tables and graphs that are displayed in this work.

The study is characterized by its descriptive exploratory character, but also by its explanatory character, since it allows the researcher to explain the factors that determine the phenomenon studied after the conclusion of the work.

Representational research focuses on quantitative and qualitative methods, for Ludke and André (2012), this type of research can be understood as direct contact with the environment in which the research is carried out and will allow the researcher to understand the object of study. From the experience lived as a teacher, the differences in the students' learning levels are observed, as it is understood that everyone learns differently at different times. In this context, this study adopts the quantitative and qualitative approach as a methodological approach aimed at obtaining information, knowledge and analysis. Thus, to the extent that the researcher constructs a dialectical qualitative study, he constructs a critique that inevitably presents the point of view that promotes and disseminates the necessary transformations in social situations.

The research subjects incorporate: BNCC, PCN's, guiding legislation made available by the MEC. Population: the informants of the research were composed of the pedagogical team of the school where it is formed by the pedagogical manager and the pedagogue, the teachers who teach the discipline of science in the researched unit and the administrative team of the school this team is formed by the school administrator, the school secretary and the administrative technical assistants of the school. Regarding the students, a total of 120 students will make up the sample from a universe of 172 enrolled and regularly attending the 9th grade of the school's morning shift

The data collection application procedure was the interview with the teachers, application of a questionnaire with the teachers and the students, a workshop with the teachers and finally for comparison data, the teachers in the first moment applied a traditional test with questions that had answers with multiple choices, which were composed of five (05) options and in the second moment an evaluation was applied with the use of the technological resources the chosen resource was the Kahoot! Where a Quiz was held.

ANALYSIS OF RESULTS AND DISCUSSIONS

According to Fernandes (2020), the moment of analysis is one of the most delicate moments of the research. It is the decisive moment of the work, because by internally criticizing the work, it aims at the content and meaning of the work. In other words, the analysis falls into two categories: criticisms of interpretation or hermeneutics and criticism of the intrinsic value of the content. According to Bardin, content analysis is "A set of techniques for analyzing communications, aiming, through systematic and objective procedures for describing the content of messages, to obtain indicators, quantitative or not, that allow the inference of knowledge related to the conditions of production and reception". (BARDIN, 1997, p.42). Due to its scientific characteristic, it must be effective, rigorous and precise; It should be based on related theories as a framework for explaining the researchers' findings.

To begin the inquiries, the research sought to improve the level of education of the teachers as well as the age of the students who will make up the sample.

TABLE 06: LEVEL OF EDUCATION OF TEACHERS

TEACHER 01	TEACHER 02
• Bachelor in Natural Sciences • Has specialization • He did not take any training promoted by SEUC, for handling ICTs	• Bachelor in Natural Sciences • Has specialization • He did not take any training promoted by SEUC, for handling ICTs

Field research conducted in March 2023

As presented, the teachers demonstrate that they only have initial training to work in the regular classroom, and they also stated that they did not carry out any training promoted by the education department regarding the use and handling of ICTs, a fact that demonstrates the lack of preparation of teachers to work in this technological universe.

To understand how the evaluation process occurs, the teachers were asked what instruments they use in the measurement of knowledge after developing the syllabus for those of the students, the answer of the professionals was surprising, as both informed that they use only the traditional methods when evaluating the contents, we remember here that the surveyed public is young students who yearn for technological innovations.

In this context, it was sought to know what is the view of teachers regarding students who are not interested in carrying out traditional evaluation activities.

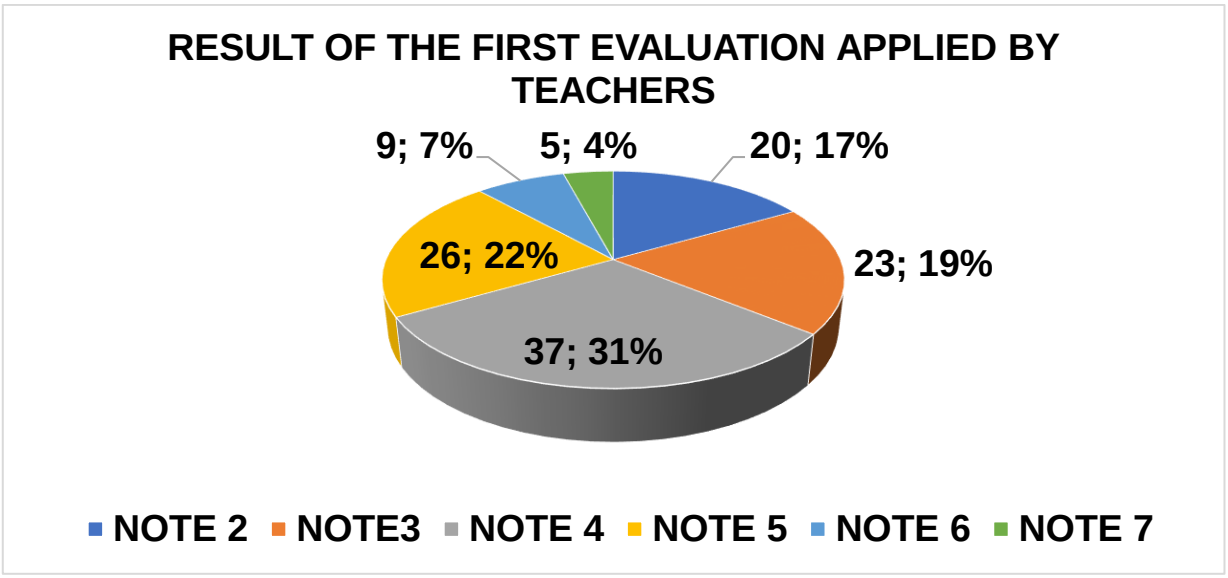
> Some students show total disinterest in carrying out traditional activities such as tests and daily activities in the notebook, a fact that in a way makes all pedagogical teaching work unfeasible, since the planning carried out by teachers in general provides for the application of routine activities used to fix knowledge. Thus, as a teacher, we saw a lack of development of differentiated activities that can hold the attention of students, however, it is difficult to develop differentiated classes,

> because, not only do I not master the technological devices, but I also do not have time to set up a class in media, I emphasize that although the students show disinterest and know that it is up to us teachers to try to change this reality, It has to be taken into account that the workload often does not allow us to develop differentiated pedagogical practices. (D-1).
>
> Since the beginning of my journey as a teacher, I have been facing this difficulty in carrying out evaluative activities, because most of the time students complain a lot when I pass tests, and even when I pass some activity to be carried out in the class notebook, however, despite trying to develop a successful activity, the school's infrastructure does not provide physical space and technological material that can help us in the development of our activities daily pedagogical training (D-2).

It can be seen in the teachers' statements that they agree that the students do not look favorably on the application of traditional methods in routine classroom activities. In the past, it has even been commented that the public is talking about young people who are inserted in a universe that is becoming more technological every day, a fact that will require a transformation in the school environment in all forms, from the classroom to even the most unusual school premises.

Both teachers highlight the importance of maintaining a good relationship with their students, however it is highlighted again that teachers still show that they are stuck with traditional methods in all fields. In this sense, in accordance with what was proposed in the methodological procedures, in order to understand the reality experienced by the students, the teachers at the beginning of this investigation developed a content with the students and soon after they felt free to carry out the evaluative activity as usual, it was not surprising when the teachers decided to apply a test to evaluate the students, whose evaluation result is shown in the following graph.

GRAPH 01: RESULT OF THE FIRST EVALUATION APPLIED BY THE TEACHERS



Source: Field research conducted in March 2023

As shown in the graph, the result of the test reflects what had already been explained previously by the teachers when they stated that the students feel difficulty in exposing in numbers the knowledge acquired in the classes taught in the classroom, these data also show the pedagogical lack in which the teachers find themselves, as they had no doubts at the time that they were asked to carry out an evaluative activity with the students, a fact that points to the need for a possible intervention by the pedagogical sector.

In what permeates the objectives investigated in this research for this phase, the teachers were asked the following question: "as a professional, how do you evaluate the influence of electronic games as an educational tool?

> As a professional, I see that it is impossible to separate the technological universe from the school environments, since every day this universe becomes more and more evident in our daily tasks, I must emphasize that in many cases this universe has made our lives easier, on the other hand this brings us great challenges, because it is not easy to insert them effectively and immediately in our school environment, Because it is not something so common and simple, as it requires preparation from us teachers to learn how to deal with these technological universes. I emphasize that without a doubt students yearn for more moments of interaction and relaxation in the use of electronic equipment, on the other hand, how to insert them in the school environment if the teachers themselves do not master this tool?, I also emphasize that although it is the responsibility of education professionals to update themselves frequently, it is also up to the State to promote actions that enable teachers to have access to a continuing education program, taking into account that all this it is still new and that this scenario was imposed by the pandemic caused by SARS COVID-19 that caught all of humanity unprepared and that today tries to develop in a way that I believe to be totally disproportionate, because every day with technological innovations expanding we will also experience an era of functional technological illiterates starting with education professionals who will not have the basis to teach their students (D-1).

> It is undeniable that the media is influencing all fields of society and undoubtedly arrives in school environments with full force, today's young people know how to handle a cell phone much better than teachers, and it is a fact that students demand more dynamic classes and with the use of electronic devices, however despite believing that these technologies can and should help us in the development of our work activities we must Remember that students spend only a few hours in the school environment and the rest of their time is idle so that they can explore other universes such as technology, for example, on the other hand, teachers, like this one who works 60 hours a week and in two different schools, we spend almost 16 hours a day switching between being in the classroom and moving from one school to another, not to mention our personal obligations that we have during the day to day, which in a way is even compromised by the excess of classroom hours, so how will we find time to develop differentiated activities, as well as, how will we find time to qualify ourselves to develop these pedagogical actions (D-2).

It is observed that both decent students recognize the importance of developing differentiated activities, that is, innovative pedagogies to improve the transmission of knowledge, as well as the evaluation process, however these are also justified when they present difficulties related to the infrastructure of the school units and especially in the management of the time they need not only to prepare material, but also to prepare

material, but also to prepare material. but also to seek specific technical qualification to deal with ICTs.

To understand this universe experienced in the daily school life, the teachers were asked as follows: "as a professional, do you feel prepared to safely use technological innovations as an educational tool? tell us about your experience;

> Although I understand that the use of technological means can help us in pedagogical development in the classroom, I cannot deny that despite my vast experience in teaching, I do not have great skills in dealing with technological devices, because although the world is undergoing major changes, it was only from the year 2020 with the pandemic caused by SARS COVID-19 that technology showed itself how much it is dominating all the scenarios, taking everyone by surprise, because in my training the most I had was a basic computer science course in my undergraduate course, a fact that did not give me any preparation to deal with applications in the classroom, in fact at the time I completed my graduation it was not even expected that one day we would reach this era so computerized (D-1).
>
> Despite knowing some educational applications and some devices, I do not feel at all comfortable in stating that I know how to deal with these technologies, because of the busy life I have and mainly, because I do not have any improvement course in the handling of these tools, I do not feel prepared to deal with this technological universe in the classroom, understands the eagerness of my students, however, I also know my limitations and I would not try to present to the students something that I do not master, because it would be very frustrating to pass on to my students that unfortunate the teacher does not master the tools, this would make my students have reasons to somehow disrespect me (D-2).

According to the teachers' statement, both do not feel prepared to deal with technological equipment in the classroom, they justified the reasons that in a way can be said to be plausible, on the other hand, this fact leads us to think that actions need to be carried out urgently to solve the difficulties presented by the teachers investigated, It is noteworthy that although only two teachers participated in the investigation, unfortunately the reality reported by them can be extended to almost all public school environments in the country.

The professors who will compose the investigation were also asked how they reflect with regard to the evaluation process, for this the following question was asked, "for you, is evaluation a continuous process, that is, is it a practice present in all phases of the teaching-learning process or not"? Explain;

> Undoubtedly, the evaluation process must be faced continuously and daily, because at all times students are not only learning but also teaching their colleagues, this factor is of paramount importance, because as a professional I know that although I try to make it as easy as possible to transmit knowledge to my students, I also know that it is almost impossible to achieve the same knowledge for everyone, Because each individual learns in different ways and ways, in this sense I evaluate my students in terms of them also helping their colleagues in the difficulties they present. (D-1).

> The evaluation process is continuous and daily, this is a fact, everything that is produced by the students and taken into account when assigning grades, the biggest difficulties I still encounter are the evaluations that are imposed for us to do together with the students, because these are the ones that are taken into account not only to assess the knowledge absorbed by the students, but also to evaluate ourselves as professionals, a fact that I often judge as unfair, because we end up being in the hands of students to prove the quality of the professional we are. (D-2).

In the statements presented, the teachers show that in the evaluation process they take everything into account in fact as it should be, because the evaluation process must always be continuous and sequenced based on a logical reason for how to do them. It is noteworthy what was reported by D-1 when he states that he allows students to interact with each other, allowing them to help each other in the transmission of the content, this fact shows us that the teacher allows students to act as protagonists in this educational process.

So far, it is observed that the teachers seem to have experience and dynamism in the evaluation process, this is a reflection of the experience they claimed to have, however, what draws attention is really the fact that we are in a universe dominated by technology and the teachers are still stuck in traditional evaluations. Nowadays this fact can even be labeled as an educational backwardness, which can have serious future consequences.

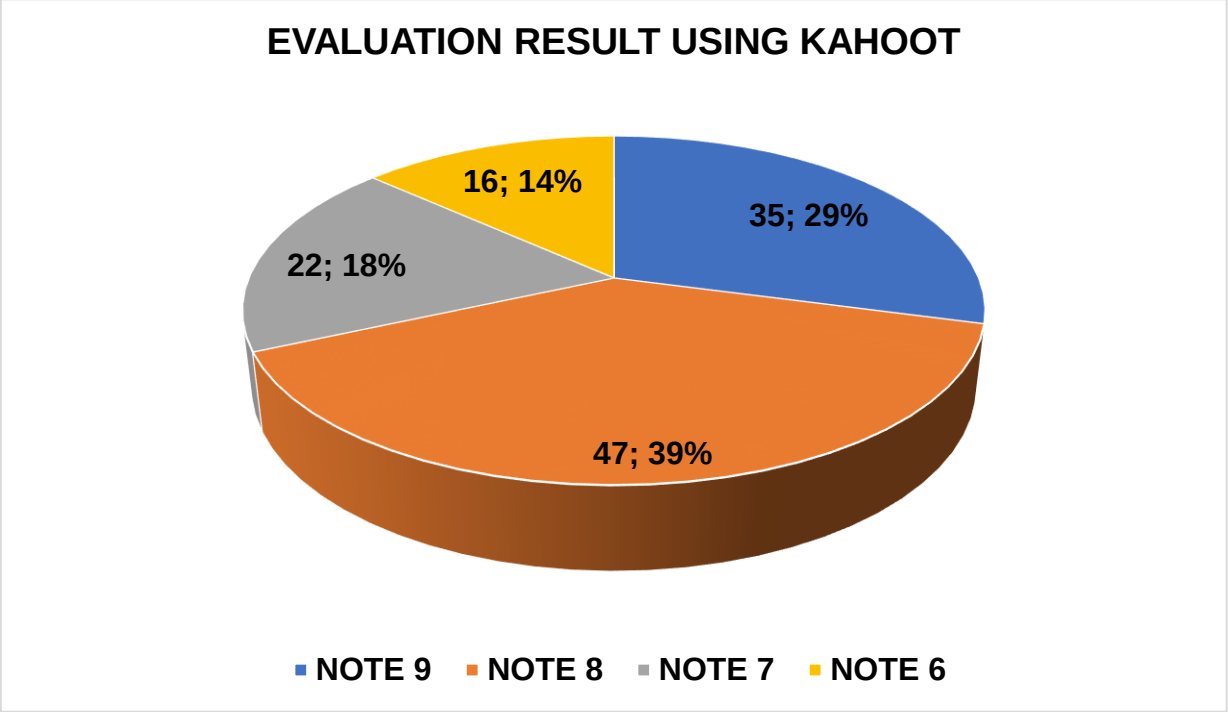
In the second moment of the research after the workshop where the tools listed here were presented, the teachers had the freedom to develop a new class, but they were asked to use the tools suggested in the workshop, in this case YuoTube and VLE were suggested as educational tools, the teachers followed the guidelines and formulated and developed their respective classes, It is pointed out that the contents taught were different from the first moment and that one content was also different from the other teacher.

After the development of the teachers' classes, an evaluative activity was applied, but in this second moment the educational application Kahoot was used to assess what would have been absorbed of knowledge by the students, each teacher elaborated a quiz[5] containing 10 questions, these being divided into true or false or multiple choice questions which was applied to the students.

The result of the evaluation carried out is expressed in the following graph

[5] Quiz is the name of a quiz game that aims to assess knowledge on a given subject. In this type of game, both a group of many people and individual participants can participate, who must get the largest number of answers right to win, in the educational application Kahoot, participants compete with each other or in a group, each question can be defined in true or false or multiple choice questions, it is important to note that, to win the game, the participant must get as many questions right as possible and in the shortest time.

GRAPH 05: RESULT OF THE EVALUATION WITH THE USE OF KAHOOT



Source: Field research conducted in June 2023

As can be seen in the graph above, the number of students who improved their percentages when compared to the first assessment improved alarmingly, since there was no student who was below 50% of correct answers, this fact shows the importance of using innovative methodologies in the development of educational practices in the classroom, making us reflect on how student performance can be improved when adhering to new techniques and methods.

With few instructions given in the workshop to the teachers, the changes are observed in a significant way, in this sense it is believed that it is possible to change the educational evaluation scenario in the short term, it is enough that adequate ways of working are made available to professionals, it is no use having many methodologies available in books, articles or in any means of communication if they are not developed in practice.

To conclude the investigation, teachers were questioned about the acceptance and performance of students when they were subjected to a change in the methodology they were used to using, for this the following question was asked: after using games and applications as an evaluation tool, did you notice any change in the performance of your students? Tell us about your experience.

In summary, the teachers agree that there was a positive change in the students' behavior regarding the interest in carrying out evaluative activities using the new technological tools, and also visible the enthusiasm of the teachers when they make these

reports. It is believed that this enthusiasm on the part of the teachers is due to the fact that the students have been able to express in numbers the real knowledge that they have acquired, because, as previously said by one of the teachers, in a way when a student is evaluated, the teachers also have their work put to the test and in this new format it was notorious that the work developed by the teachers had a great influence on the students' results.

Working with technological tools in classrooms in a way may seem like a challenge, however it should be seen as something routine that will currently be part of the daily life of schools that will have teachers as its main driver, since they are the ones who are dealing daily with students in the classrooms, in this sense it is of paramount importance that these professionals are properly prepared to face this new technological era that has arrived revolutionizing society and bringing with it new horizons.

Much still has to be discussed regarding disrespect for educational development, much research must still be carried out and findings must be made, however it is a fact that for an education to occur that is up to the development that is desired for a country as rich as Brazil, it is undeniable that it must start in the early days of the construction of basic family values, passing through to the school, where the individual will receive formal education so that he can become a citizen who has a complete education that covers all segments, these being family, social, moral and ethical values.

FINAL CONSIDERATIONS

The main objective of this investigation was to demonstrate how the use of educational applications contribute to improve the performance in the evaluations of students in the 9th grade of elementary school at the teacher Tereza Siqueira Tupinambá school Manaus-AM/Brazil. Evaluation has become a challenge for education professionals, in view of the valorization of the student's knowledge and the new paradigms of school evaluation, which should be used to assist their pedagogical practice, directing the steps that must be followed in the face of the reality found, having to move from theory to practice, in a social and inclusion vision.

In this action, it is necessary to be clear that the evaluation should focus on monitoring the process of construction and assimilation of knowledge, how the student learns, what difficulties he has, making this a loving act, striving for the quality of what is taught, thus preventing the evaluation from being summarized in instruments that measure and quantify the student's knowledge, In other words, the teacher must be placed as a bridge between the student and knowledge so that, in this way, the student learns to think

and question for himself and no longer receive passive information, as if it were a simple deposit from the teacher.

It was highlighted in the research quite clearly that the teachers, despite claiming to have limitations, are also willing to dive deeply into the technological universe to be up to the level of their students, while in the motivational aspects, the teachers demonstrated skills that can be improved to improve the educational process. It was found that the teachers of the investigated School seek to understand the evaluation and are beginning to use it as an instrument in favor of their work, when they refer to it as a continuous action and an aid for its planning, no longer in a punitive way for the students.

By analyzing the data found, it was found that the premise raised was confirmed because the students when carrying out the evaluation in the traditional way presented a low performance, but in the second moment when they were submitted to evaluative activities using the use of technological resources as a method, they demonstrated a new panorama. In this way, it is proven that with the use of educational applications it is essential to help the teaching-learning process of students

The research carried out proves that the insertion of technological tools in school units is in short, as they bring a new pedagogical perspective, thus motivating not only students, but also teachers since without a doubt these professionals are very satisfied when they observe that the fruit of their work has taken place in a positive way. It is important to underline that ICTs have recently entered the field of education and that they have only gained evidence in these current proportions because of the pandemic that brought us new challenges

This investigative work is concluded, which had as its core of discussion to demonstrate how the use of educational applications contribute to improve performance in assessments, emphasizing that it is necessary to continuously monitor the performance of students in order to prevent possible difficulties, observing them and reflecting on their desires, replanning and proposing pedagogical interventions.

REFERENCES

1. Alves, M. C. R. P. (2018). Avaliação escolar: Ameaça ou proteção? Esboço de análise psicossocial. Dissertação de Mestrado. Universidade Estácio de Sá, Rio de Janeiro. Disponível em: https://portal.estacio.br (Acessado em ag. de 2023).

2. Base Nacional Comum Curricular. (2017). Disponível em: https://eventos.set.edu.br › index.php › enfope › article › download. Acesso em abril de 2023.

3. Brasil, MEC, SEMTEC. (1998). *Parâmetros Curriculares Nacionais para o Ensino Médio*. Brasília.

4. Brasil. (1996). *Diretrizes e Bases da Educação Nacional, Lei 9394/96*. Brasil em Ação, Brasília.

5. Brasil. (1997). *Parâmetros Curriculares Nacionais*. Ministério da Educação e Desporto: Secretaria da Educação Fundamental: Brasília.

6. Bloom, B. S., Hastings, J. T., & Madaus, G. F. (1983). *Evaluación del Aprendizagen* (Tomo 1). Argentina: Troquel.

7. Carvalho, G. (2017). *Avaliação: Novos tempos, novas práticas* (5ª ed.). Petrópolis, RJ: Vozes.

8. Depresbiteris, L. (2015). *O desafio da avaliação da aprendizagem: dos fundamentos a uma proposta inovadora* (6ª ed.). São Paulo: EPU.

9. Fernandes, C. C. (2020). *Metodologia da pesquisa em educação*. Mafra: Nitran.

10. Fonseca, L. (2022). Tecnologia na escola. Disponível em: http://www.aescola.com.br/aescola/seções/20tecnologia/2022/04/0002. Acesso em: 04 jul. 2023.

11. Freire, P. (1987). *Pedagogia do oprimido* (Vol. 21). Rio de Janeiro: Paz e Terra.

12. Haydt, R. C. C. (2015). *Avaliação do processo ensino-aprendizagem* (2ª ed.). São Paulo: Ática.

13. Marconi, M. de A., & Lakatos, E. M. (2010). *Fundamentos de metodologia científica* (5ª ed.). São Paulo: Editora Atlas S. A.

14. Perrenoud, P. (1999). *Avaliação: da excelência à regulação das aprendizagens – entre duas lógicas*. Porto Alegre: Artes Médicas Sul.

15. Pessanha, E. C. (2016). *Ascensão e queda do professor*. São Paulo: Cortez.

16. Saul, A. M. (2014). *Avaliação emancipatória: desafio à teoria e à prática da avaliação e reformulação de currículo* (6ª ed.). São Paulo: Cortez.

17. Silva, J. F., et al. (2016). *Práticas avaliativas e aprendizagens significativas em diferentes áreas do currículo* (5ª ed.). Porto Alegre: Editora Mediação.