



The use of technologies in supervised internships

O uso das tecnologias no estágio supervisionado

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ABSTRACT

As a result of the social distancing caused by COVID-19, the supervised internship in the Games and Concrete Materials subject took place entirely virtually, so electronic tools were used to carry out the classes, which according to (DORIGONI; SILVA 2013, p.14).

Keywords: Technologies, Students, COVID-19.

RESUMO

Por consequência do afastamento social causado pela COVID-19 o estágio supervisionado na disciplina de Jogos e Materiais concretos ocorreu de forma totalmente virtual, deste modo utilizou-se de ferramentas eletrônicas para realização das aulas o que de acordo com (DORIGONI; SILVA 2013, p.14).

Palavras-chave: Tecnologias, Estudantes, COVID-19.

1 INTRODUCTION

As a result of the social distancing caused by COVID-19, the supervised internship in the Games and Concrete Materials subject took place entirely virtually, so electronic tools were used to carry out the classes, which according to (DORIGONI; SILVA 2013, p.14).

[...] electronic networks are establishing new forms of communication and interaction in which the exchange of group ideas, essentially interactive, does not take into account physical and temporal distances. The advantage is that networks work with large volumes of data storage and transport large amounts of information in any time and space and in different formats. (DORIGONI; SILVA 2013, p.14).

In this way, the use of these technological tools gave us the opportunity to discuss texts on the use of games in the classroom, as well as to socialize among colleagues. In agreement with Rincón and



Fiorentini 2015, the virtual meeting space for classes in the Games and Concrete Materials subject "is a place where knowledge, experiences and the subject's own literature converge to complement and motivate the reflections and analysis of the subject's participants". For a supervised internship, the discussion of texts and the socialization of experiences between teachers, interns and students is of fundamental importance.

The participation of the students and the trainee in the discussions of the texts aims to contribute new knowledge to both the students' and the trainee's learning, so we understand that learning is a process of participation and negotiation (CRECCI; FIORENTINI, 2013). Given the above context, the students took part in the lessons, dialoguing about the texts suggested by the teacher and drawing up summaries and lesson plans.

In this way, the classes were developed through dialog, reading of texts and discussions on the use of games and concrete materials in the teaching and learning of mathematics.

Given the above, I must emphasize that the aim of this article is to show the public to be reached the importance of the supervised internship as well as the use of technological tools in the classroom, bringing to the students something innovative, new forms of participation and interaction of the students, in this way the internship can bring to the trainee great learning and reflections for their future, as well puts it (SCALABRIN and MOLINARI, 2013, p. 5)

[...] the internship is an important practice, because it has great benefits for learning, for the progress of teaching with regard to its formation, taking into account the importance of putting into practice a reflective attitude right at the beginning of their life as an educator, because it is the way in which the student will experience in practice what they have studied at university.

In this sense, it is understood that the observatory internship aims to make the intern's learning effective by adding to it the construction of knowledge, skills and abilities, being a relationship with theory and practice under the supervision of the classroom teacher.

Regarding the use of technological tools as a methodological part of supervised internship classes, Lopes and Pimenta argue that such tools give us

[...] the opportunity to transform it into a strong ally in the education of its users, associating it with the process of acquiring knowledge, so that the student can also improve or develop new cognitive skills through contact with the application and media resources that this technology can offer. (LOPES and PIMENTA, 2017, p.56)

As we can see, the technologies included in the teaching and learning process can provide students with new opportunities for interaction, expanding and enriching their knowledge, as these educational practices will make these students evolve in an educational sense.

The 21st century was marked both by the social distancing caused by COVID-19 and by digital information and communication technologies, which during the social distancing were a way for the planet



to communicate and, during the pandemic, the use of these technologies became more frequent throughout society, A sector that has seen a lot of growth has been education, which was previously used as a means of teaching only by Distance Education (EAD) courses, during the pandemic it became an essential tool for all types of university and school education. (SILVA, 2017)

In this way, we believe that the advance of digital technologies in the 21st century has led to changes in teaching and learning for students, changes that have broadened teaching. These trends have brought new educational reflections, including hybrid teaching, which involves synchronous and asynchronous classes. "Faced with these changes in society, the predominant model of traditional teaching faces enormous challenges (SILVA, 2017, p. 3)". We believe that we need to use technology more frequently in school environments so that we can have an education with more active participation among students.

2 OBJECTIVE

- To show the readership the importance of the supervised internship.
- Express opinions on the importance of using technological tools in the classroom.

3 METHODOLOGY

These are classes, developed with the use of technological resources via google meet, in which

The classes were developed between synchronous and asynchronous classes in which we read the material indicated by the teacher in the asynchronous classes and discussed the readings in the synchronous classes.

Summaries of some of the texts were prepared and discussed in synchronous classes, so as the discussion emerged, the students made changes to the summaries. I must emphasize that the mediating teacher always provided space for the students to discuss the articles they had studied.

4 DEVELOPMENT

When we read Professor Manoel Oriosvaldo de Moura's work, entitled: "The game and the construction of mathematical knowledge", the students were instructed to summarize the reading of the text so that in the subsequent class it could be discussed, the aim of reading the text was to make the students understand that mathematics has various ways of teaching and these ways of teaching and learning bring to the students elements that will make up the students' knowledge, in this way it was aimed to bring content that the academics already had mastery of leading them to assimilate it with something from their social life and in a concrete way, resulting in a better familiarity and performance with the content worked on.

The aim of the teacher, Freud Romão, was to get the students in the classroom to reflect on the reading and to put their understanding and reflections down on paper when they prepared the summary



requested, but they were not asked to hand in the summary, During the synchronous classes, these summaries were altered in the course of the class according to the discussions around the text that served as a reference for their preparation. This took place with the interaction of colleagues and the participation of the teacher, which gave the students a new perspective and also new reflections, improving the writing of the summary.

Through the readings and discussions, the students and the teacher were able to see the author's vision of the teaching process. For the author Manuel Oriosvaldo, when teaching, the individual must bear in mind not just one side, but two sides of the knowledge process: "One is that, when learning, the subject assimilates what is new to the body of knowledge already acquired; the other is that this favors the development of cognitive structures". (Moura 1992, p.46-47)

In this way, the text makes it clear that when working in the classroom using games as teaching strategies/tools, the teacher provides the class with new learning and skills, but that the game chosen by the teacher to be worked on must have objectives to be achieved and that it will fulfill and assist in the teaching of the content worked on in the classroom, which is to provide students with the acquisition of the development of their skills so that they are prepared to deal with everyday problems, leading them to be better prepared for their future.

Still in the development of the readings, we were given the text by Raupp and Grando (2016), which was entitled "Mathematics education: in focus the game in the teaching and learning process", where in a similar way to the previous classes the students were instructed to read carefully and prepare the summary of the text in question, however the very pleasant reading text had the objective of leading us to reflect on the use of games in the classroom if it is a trend or if it is already part of the methodologies for teaching and learning mathematics, After a thorough reading of the text, we can conclude that yes, it is a methodology and that in some way it is already part of mathematics education. The authors themselves say that there are several theories and paths that can be taken by a mathematics teacher to use in their pedagogical planning, which can contribute to and enable the development of the students involved in this teaching and learning process.

Thus we observe that throughout the text we see that it aims to understand the importance of playfulness and games in the classroom, for the authors playfulness has the function of allowing games and games to assist in human development and growth, according to the authors playfulness contributes to the development of language as well as social relationships. In this way, the authors make it clear that what happens through play is a type of social learning that can take place not only in the classroom, but also "during breaks, at recess, when students arrive and leave school".



In this way, we learned that games are part of children's learning and that when teachers choose to work with playfulness in the classroom, they must work with the intention of providing students with learning and skills.

With regard to the work by Dario Fiorentini and Maria Ângela Miorim (1990), entitled "A reflection on the use of concrete materials and games in the teaching of mathematics", it provided us with excellent reflections on the use of games and concrete materials in the classroom. One of these reflections refers to the great difficulties encountered by certain students in the process of learning mathematical content, which for the text students have difficulty assimilating and understanding mathematics and for this reason end up failing the subject. According to Fiorentini and Miorim (1990, P. 01) teachers:

[...] is looking for new elements - often mere recipes on how to teach certain content - which it believes can improve this situation. Positive evidence of this is the ever-increasing participation of teachers in meetings, conferences and courses. Fiorentini and Miorim, (1990, p. 01)

The participation of teachers in congresses and lectures is visible, but it is not enough to attend conferences in search of new ways of teaching, new games, the game as a teaching methodology is not enough to have only objects in the classroom but objectives, that is, to work the game in the teaching of mathematics first we need to analyze the objectives to be achieved. This is not exactly what happens with many educators. Sometimes they work with games because they are motivating or simply because they have heard of the game, but they don't stop to think about the objectives of the game and how rich in terms of learning that game can become in the classroom when used correctly.

The text thus aims to analyze ways of working with playfulness in the classroom and warns that: "Nothing should be given to the child, in the field of mathematics, without first presenting them with a concrete situation that leads them to act, to think, to experiment, to discover, and from there, to dive into abstraction" (Azevedo, 1979, p. 27). It is therefore understood that in order to achieve success and learning in the classroom using playfulness, the rules of the game should be explained, and students should be encouraged to make discoveries without having to give the answers. According to the authors, pedagogical games:

They can come at the beginning of a new piece of content in order to arouse the child's interest or at the end in order to anchor learning and reinforce the development of attitudes and skills. Fiorentini and Miorim, (1990, p. 04).

Having seen the above, we can see the importance of choosing the game to work on in the classroom and the purpose of its applicability.

Due to the pandemic, classes took place completely virtually, so we were virtually introduced to the portable laboratory (LAPEN), where the mediating teacher showed us the objects and games created by the



scholarship holders, at that moment when showing the materials produced by the former scholarship holders, Professor Freud Romão was guiding us how to use and what the objectives of each object presented, the teacher's intention is to better prepare students for classroom performance in their future profession.

In this lesson, the teacher pointed out that the aim of LAPEN is to produce manipulatives to be distributed to teachers in the state of Tocantins, but that due to a lack of funds, the laboratory is at a standstill. In addition to this visit to LAPEN, we had the privilege of visiting Professor Freud Romão's Science and Mathematics Club, where he showed us various functions of the site, such as the repository of articles, including some produced by the fellows themselves, the photo gallery, the participation of fellows in events, etc.

Finally, the teacher asked the students in the course to draw up a lesson plan involving some of the materials in the texts they had worked on in class. The teacher's aim was to teach the students how to prepare a good lesson plan, so that they would be better qualified for the job market, given that they were undergraduates. The plans requested of the students were drawn up at home and presented in the following classes, so that we could discuss the plan presented and suggest changes to improve it. This way, when the plans were presented, the teacher would make his points and the students would often make the changes right there in class.

5 FINAL CONSIDERATIONS

Given the above, we conclude that the virtual supervised internship carried out using technological tools offered by the Federal University of Northern Tocantins, via google meet, in the subject of games and concrete materials, under the supervision of Professor Dr. Freud Romão, provided us with great learning. The master's degree aims to train and improve teachers so that they can perform their duties better, not only in basic education, but also to help expand the number of educators in higher education, contributing to the growth of teaching quality, regardless of the network.

During the internship, I had the opportunity to improve my knowledge of the application of games in the classroom and the use of concrete materials in math classes. With the internship, I was able to perfect my teaching work, and I also shared my experiences in basic education with the students who took part in the subject. During the classes, I learned a lot from reading the texts indicated in the asynchronous classes, as well as from the discussions held in the synchronous (face-to-face) classes, in which we discussed and debated the texts, comparing them with the concrete reality and experiences I had during my time as a teacher in basic education.

One of the texts we had a lot of discussion about was the text by Andréa Damasceno Raupp and Neiva Ignês Grando entitled "Mathematics education: in focus the game in the teaching-learning process". We have learned for our professional career that the game and concrete/manipulable materials have been



part of the pedagogical proposals of mathematics education, and that at the same time this type of pedagogical resource has been the object of study in research in the area, and what's more, it is a pedagogical support that many educators do not use. The text points out that:

During the game, we noticed that the children (opponents) often helped each other during the game, clarifying the rules and even pointing out better moves (strategies). Competition is minimized. The objective becomes the socialization of knowledge of the game. In this process of socialization in the game, the child listens to their classmate and discusses, identifying different perspectives and justifying themselves. (Grando 2004, p. 26 apud Raupp and Neiva Grando 2016)

In view of the above, I learned that when working with games in the classroom, I could have observed more of the students' behavior, as it would have been a way of better understanding the students' learning and development when carrying out the proposed activities using the manipulated material.

After reading the text and discussing it, I was given the opportunity to share my pedagogical experiences in the classroom, during which I worked on the use of concrete materials in the classroom with students in the second grade of high school. I observed the participation and development of the students during and after carrying out the tasks using the concrete materials.

When I took part in the internship class, more precisely with regard to the class on the portable laboratory, I had the opportunity to observe how vast the field of teaching is with the use of manipulable materials, I got to know new games such as the game Dominoes of mathematical equations, made from the bark of the cajá, trees found in the region of Araguaína, which was created by Pibidiano Talles Marcos at the time of his graduation.

In this way, I learned that we can improve our knowledge on a daily basis, as Fiorentini, Miorim apud Skinner (1904) say: "[...] learning is a change in behavior (development of skills or changes in attitudes) that takes place as a response to external stimuli, controlled by means of reinforcement".

Nowadays, technological tools in the school environment are a resource that should be included in the teacher's lesson plan, as most students use a cell phone, so we believe that including these tools in lessons will help keep students focused on teaching and learning.



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