

An experience of project in remote education at COVID's Pandemic: Working with technological didactic resources

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Abstract— *This work is the result of the interdisciplinary project “Let’s talk about COVID-19?”. The objective was to develop the theme of COVID remotely, using technological didactic resources. The project was carried out with students and teachers from the 6th to the 9th years, which develops remote education in the context of the pandemic. Teachers from different curricular components made proposals for investigative questions seeking to relate the theme of COVID-19 to the skills related to each one. As a conclusion to the learning and evaluation process, students were invited to present their considerations and findings in discussion forums for each teacher. This investigative didactic experience proved to be effective in the context of remote teaching. The students got involved in their research and developed pertinent discussions, as well as resolved doubts in the discussion forums, which is an important didactic tool in this context.*

Keywords— *didactic experiences, remote teaching, science, technology resources.*

I. INTRODUCTION

The year 2020 surprised us with a pandemic of proportions that we had not experienced before. COVID-19 caused by SARS-CoV-2 led the world to social distancing, saturated health systems and was responsible for thousands of deaths in a few months. In addition to the risk factors (defined by individual's biological issues), people are not in the same socioeconomic condition to facing the disease, having several vulnerabilities¹.

United Nations Children's Fund - UNICEF² warns that COVID-19 generates hidden victims, especially children. Away from school, they are more exposed to domestic violence, absence of contact with teachers to support them, lack of meals that intensify malnutrition, in addition to factors such as less medical assistance and philanthropic actions. From the perspective of education, technological resources were soon established to replace face-to-face classes.

This work aimed to develop the classes about theme of COVID remotely, using technological didactic resources. More specifically, promote the individual and collective health in students and their parents, as well as to relate curricular components to the context of the pandemic, for

the development of critical reflections of children and adolescents in face of the information they experience.

II. METHODS

The project was developed in July 2020, with students from the Final Years of Elementary school (6th to 9th grade), in a public school of Minas Gerais, Brazil. That is in the process of remote education due to the time of the COVID-19 pandemic. In this system, students receive Tutored Study Plans for four weeks each which contains all curriculum components with texts and exercises, such as a chat for teachers explains.

To aim the objective of this research, the teachers send to the students questions relating COVID-19 and their discipline (math, science, history, etc.), as well as directions of readings and researches were proposed so that students could be taken to investigate the theme to answer the questions.

At the end was developing a discussion forum on the students' findings from the investigation of the proposed questions, via chat with teachers.

III. RESULTS AND DISCUSSION

The questions related COVID-19 to the curricular components, although some teachers have asked questions that did not have that relationship, but exclusive about to pandemic. As an example of these activities, there are the questions: Make a drawing illustrating how this period has been in people's routine. What are the precautions to protect yourself and the difficulties in this process? (Tell about your routine and your doubts about the disease) (Questions elaborated by the author).

Those questions were sent in the science curricular component, as a way for students to investigate ways of prevention, as well as rethink their habits when they were describing their routine, relating to what they discovered in their research on care to protect themselves.

This proposal follows Carvalho³, which defines “[...] it is based on the knowledge that the student brings to the classroom that he seeks to understand what the teacher is explaining or asking”, therefore relating the theme to your daily life is essential for the understanding of a content.

The discussion forum was used as instrument for building knowledge and assessing the learning process. In the period which they occurred a considerable increase in the participation of students in the chat was observed. For some authors, such as Scherer⁴ (2009), the forum allows collective and individual learning, being a space open to questions and movements to a mutual understanding

These movements can be seen below, in the reproductions of some dialogues in the discussion forum of science: “Look at my routine, I believe it's nothing, I wake up, I have coffee [...] I usually do activities in the morning, after that I usually help my mother to clean up the house and go back and study” (student x); “I'm staying at home, taking care and when I need to leave, I go with a mask and take an alcohol gel” (student y).

During the forums, the students reported that they were interested in the theme and in the research they carried out to be able to answer the proposed questions. Some had doubts and were helped by colleagues and teachers in the discussion forum. In the end, they said they liked the opportunity for a discussion forum on the proposed investigation.

IV. CONCLUSION

Therefore, the results presented here contribute as a way to reduce the impacts of problems associated to the remote education at the pandemic, encouraging learning through online discussion forums, to bring teachers and students closer together. This work also contributes to the contextualization of the skills of the curricular components in relation to the pandemic.

The project contributed to the possibility of a successful instrument for future actions that promote and encourage student participation and discussion in the chat or other available virtual platforms: forums and investigative experiences.

In addition, this investigative teaching experience provided a valuable opportunity for students to be able to answer questions about the pandemic, its care, routine and afflictions, having direct contact with teachers via chat to assist them.

Finally, it allowed interdisciplinarity in science education, expanding the theme of COVID-19 to all curricular components, in addition to developing a sense of research in students, fundamental to the field of building scientific knowledge.

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