

Popular Course: A Preparation for ENEM

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Abstract: Brazil is a country that does not invest enough in basic education, thus leaving a gap in the knowledge of young people studying in public schools and jeopardizing their future. One of the main ways to get into college in Brazil is through the National High School Exam (ENEM), a multiple-choice test administered by the National Institute of Educational Studies and Research. In the project: Popular Course: a preparation for ENEM, students from the Federal University of Technology – Paraná, Apucarana campus volunteered to offer online tutoring of basic content in: biology, physics, geography, history, mathematics and chemistry, from Monday to Friday, during thirteen weeks. The main objective of these virtual meetings was to help interested students enrolled in the program to prepare for ENEM, in a dynamic and freeway. The volunteers were free to use the means they considered most appropriate for each content, from online physics experiments to game-based learning platforms, which contributed positively to the learning of the students enrolled in the project and consequently to a better performance in the tests.

Keywords: High school, ENEM, Educational technology

Introduction

In Brazil, college, besides being seen as a source of knowledge and personal improvement, ends up being mainly seen as a way to improve one's life, according to the educator Paulo Freire, "if education alone does not transform society, without it society doesn't change either", showing the importance of knowledge in people's lives. Despite this being common sense, the country does not have a good management of the investment given to the area of education, generating several problems for public servants who feel unmotivated with the neglect of the government in relation to delayed salaries, poor infrastructure and lack of materials, leaving professionals dissatisfied with the profession (Oliveira et al., 2016). This feeling is shared with public school students, who, in turn, even indirectly, end up being influenced not to follow the same career and also contribute to the school environment still being seen as something where students do not want to be, which taking into account the said conditions, it is easy to understand the reasons (Tartuce et al., 2010).

One of the main ways to get into college in Brazil is through the National High School Exam (ENEM), a multiple choice test applied by the National Institute for Educational Studies and Research where students from all over the country test all their knowledge for two entire afternoons on two Sundays where they must answer ninety questions each day and develop an essay based on the theme presented in the exam and according to the score achieved can enroll in one of several colleges in the country. In the project, *Cursinho Popular: A Preparation for ENEM*, students from the Universidade Tecnológica Federal do Paraná, Apucarana campus, volunteered to give free dynamic online classes from Monday to Friday during thirteen weeks. The classes were given through the Google Meet platform and lasted for two hours, during which time the volunteers explained about the subject of the day and answered questions from the registrants. Because the classes were online, it was possible for people from different parts of the country to participate, most of the enrolled students were from the 1st to the 3rd year of high school, but there were also some who had already graduated, but were not enrolled in higher education (see Figure 1).

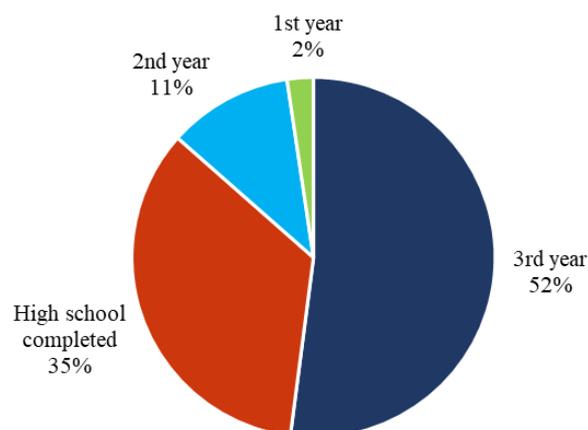


Figure 1. Percentage of students in each year of high school

Note: Own authorship, Google Forms (2021).

During the classes, the volunteers were free to explain the day's contents in any way they saw fit, from exercise solving, videos, to online experiments and game-based learning platforms, which contributed positively to the students' learning and a better performance in the exams.

Thus, the project emerges as a great opportunity for college student volunteers to have a closer experience of what it is like to be a teacher and to become interested in the career, as well as to be able to share tips and knowledge to those enrolled in the project, who may already have a contact with the college and mainly fill a gap in their knowledge so that they are prepared to enter higher education.

Method

For the project to happen it was made a preparation since June, where it was necessary to analyze which were the most recurrent subjects of each subject that were charged in ENEM, organize the lists of exercises for each subject, make the class schedule, create a google form so that people interested in watching and participating in the classes could sign up and disclose the project to reach more people. As the project happened totally online, some measures had to be taken so that the volunteers could talk to each other and to the registered students, for this, two groups were created in the WhatsApp application, one where only the volunteers helped each other and another with the volunteers and the students to send study materials and links to the classes.

The classes started in August, and went on until November, lasting a total of thirteen weeks. The means by which the students participated in the classes was through the Google Meet platform, starting at seven o'clock in the evening and ending at nine o'clock at night. All the classes were recorded and made available for the students to watch again. Besides the recorded classes, every week the volunteers created a study schedule for the students, where there were links to video classes, exercise lists and other materials such as summaries.

In addition, two online mock exams were performed with the objective of preparing the students for ENEM, since many times they never had contact with the exam, which would harm their performance. By doing the mock exams it was possible for them to have greater control of their time, discipline, and begin to adapt to the style of the questions on the exam.

During the classes, the volunteer responsible for the subject to be discussed was free to teach the subject in the way that he or she thought would be the most dynamic and that would get the most out of the class. During chemistry and physics classes, for example, it was common to show videos where an experiment was performed that would contribute to a better understanding of the subject or even make use of learning platforms based on games. With this it was possible for students to become more interested in the subject and consequently understand more about it, besides being able to see where it was present in their daily lives.

Results

Analyzing the figure 2, the project, Popular Course: A preparation for ENEM, had a great return from the students, considering that when the research was done most of the students had not yet taken the exams.

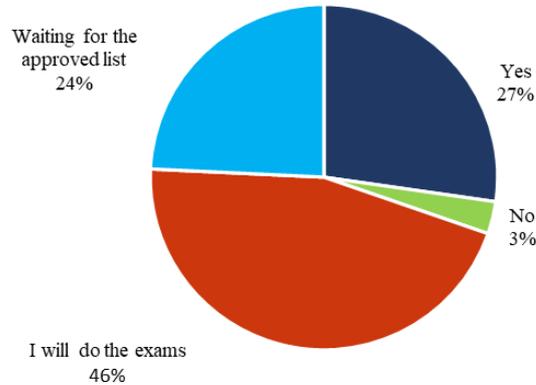


Figure 2. Percentage of approved students in higher education

Note: Own authorship, Google Forms (2021).

Although some students have not yet taken the exams, it is possible to see that there have been many approvals in relation to those who have not managed to enter higher education, and it is also possible to see that approximately 24% are still waiting for the list of approved students to be published, so it is to be expected that the approval numbers will increase as students take the exams and their results come out.

Another very important piece of data that must be taken into account is the evaluation done by the students in relation to what they thought of the project, so that it is possible to improve and have a return on the activities.

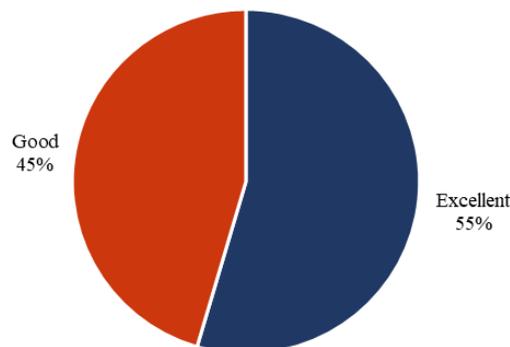


Figure 3. Evaluation of the project by the students

Note: Own authorship, Google Forms (2021).

Figure 3 shows that, in general, people were satisfied, since 55% found the way, the project was excellent and 45% found it good. Nevertheless, the Popular Course has some points where it can be improved, since, according to Figure 4, some students did not have a very good experience with the online classes, 15% of the votes had a regular experience with the classes in this format, showing that there are some aspects that need to be improved.

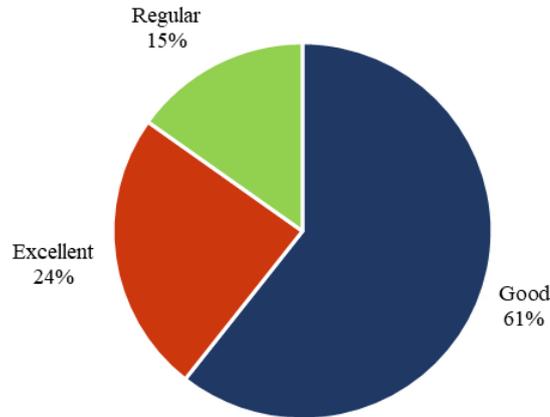


Figure 4. Experience with classes in an online format

Note: Own authorship, Google Forms (2021).

Also, in this satisfaction survey conducted with the project participants, general feedback was obtained for each subject, thus being possible to see specifically in which subjects it is necessary to improve and in what to improve, as for example in the feedback about the geography classes (Figure 5).

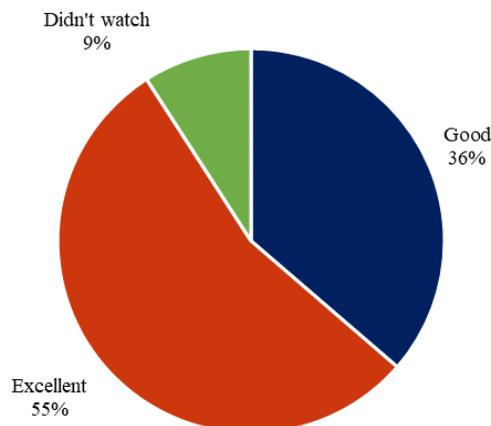


Figure 5. Feedback about the geography classes

Note: Own authorship, Google Forms (2021).

Although some people did not participate in the geography lessons, they are an example where the students enjoyed it well and liked the way the lessons were taught. This positive feedback did not only happen with these classes, but there are also classes where the students did not fully enjoy the lessons, for example, the math classes (Figure 6).

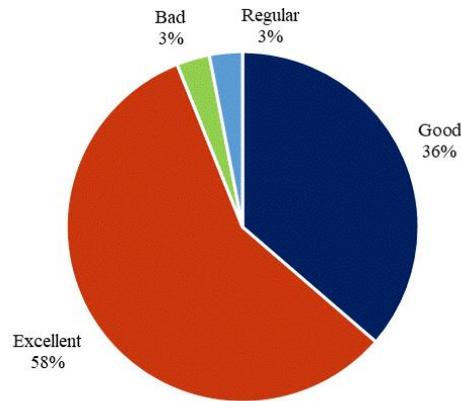


Figure 6. Feedback about the mathematics classes

Note: Own authorship, Google Forms (2021).

Discussion

Based on the evaluation made by the students, it can be seen that the project managed to achieve its main objective of transmitting knowledge to the population in a free and dynamic way. However, it is a fact that there are some points that can be improved and that it was only through the survey answered by the people who participated that it was possible to get to know them so that in future editions the project will always continue to improve.

From Figure 4, it can be seen that some students were not entirely satisfied with the online format classes, this is due to some factors, such as the inexperience of the student volunteers in teaching remotely and the limitations that this format brought, besides the fact that the sound, image and internet quality affected the students to participate in the classes.

Teaching online brings limitations that the students are not used to having in a regular classroom, because the direct contact with the teacher is as important for the students to pay more attention as it is for the teacher to be able to identify more easily if the students are understanding the topic. In the same way, this format also has its positive sides, since only through it was possible to meet people from different parts of the country and also bring together a group of people who could hardly fit in a classroom.

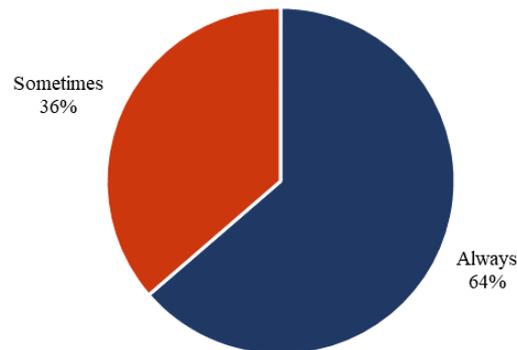


Figure 7. Frequency with which students used the study schedule

Note: Own authorship, Google Forms (2021).

According to Figure 7, the weekly study schedules were used a lot, indicating that it is a good option to continue doing it in the next editions, because it helped the students to know who would be the monitor responsible for the subject of the day, as well as to use the suggested study materials, such as videos, exercise lists and summaries.

On the other hand, other available resources were not used as much, as is the case of the recorded classes, which, even though there was a portion of students who did not use them, as shown in Figure 8, was important so that those enrolled in the project who could not follow the live classes could have the same opportunity and, on top of that, review the subject as many times as necessary, thus, it is a measure that even if not used by everyone, it is essential that it continues to be done in the coming years.

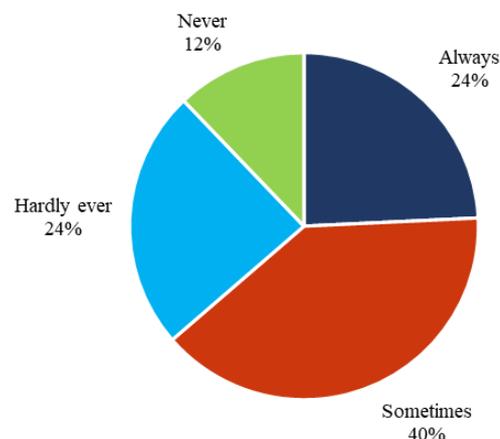


Figure 8. Frequency with which students used the recorded classes

Note: Own authorship, Google Forms (2021).

Still, according to the suggestions of the registered students, some improvements can be made, such as including classes and tips on writing, since it is something very important for the exams to enter higher education, and everything possible will be done so that in the next editions of the project this demand is satisfied. In addition, there were requests for the classes to start earlier, as some students felt tired because the classes were held at night, which will also be taken into consideration.

Conclusion

The Popular Course: A preparation for ENEM project obtained satisfactory results in terms of approvals in higher education and mainly in sharing knowledge with the population. Being totally online was a challenge both for the students, who overcame their tiredness and participated in the classes even after an exhausting day at school and at work, and for the volunteers, who had to adapt their routine in the middle of college and work so that the classes could be as good as possible.

Overcoming the difficulties that the online format brought was the first step so that the volunteers could enjoy all its benefits, which made a total difference in the students' learning, whether through the games or the online experiments that added and made the class lighter and more dynamic. Just because the classes were held remotely, it was possible to meet people from different parts of the country and even bring together a group of people who could hardly fit in a room.

Besides being very important for the participants, the project helped the volunteers to have a closer experience with teaching, contributing to the students' interest in the career by sharing knowledge, tips, and also developing their skills in areas such as public speaking and organization.

There are points where it is possible to improve and suggestions from the students themselves that will be analyzed so that in the next editions the project continues to evolve and is able to bring knowledge and the opportunity to conquer the dream of entering higher education. Thus, with the success of the remote classes, it was decided to keep this format and resume face-to-face classes when it is safe for the students, thus serving even more the population that can choose which format is more suitable to their routine.

Recommendations

For the next editions of the project, it is important to continue with the support materials that have worked and helped the students, such as the recorded classes and the study schedules, as well as always trying to improve and meet the population's demand for new classes and class schedules. With the research carried out in the 2021 project, data was obtained only from the online classes, in the next few years the project will have both online and face-to-face classes, which is a great way to start evaluating which of the two class models the students have the best performance in.

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References

- Oliveira, T. F., de Lins, V. L., da Silva, R. M., & Fontoura, L. V. (2016). Qualidade de vida no trabalho: um estudo comparativo entre professores de escola pública e privada. *Psicologia Argumento*, 85(34), 104–119. <https://doi.org/10.7213/psicol.argum.34.085.AO02>
- Cavenaghi, A. R. A., & Bzuneck, J. A. (n.d.). A Motivação de Alunos Adolescentes ... - educere.bruc.com.br. Retrieved January 17, 2022, from https://educere.bruc.com.br/cd2009/pdf/1968_1189.pdf
- IBGE. (2020). Síntese de Indicadores sociais. Coordenação de População e Indicadores Sociais.
- Klein, R. (2006). Como está a Educação no Brasil? O que fazer? Ensaio: Avaliação e Políticas Públicas Em Educação, 14(51), 139–171. <https://doi.org/10.1590/s0104-40362006000200002>
- Tartuce, G. L., Nunes, M. M., & Almeida, P. C. (2010). Alunos do Ensino Médio E atratividade da carreira docente no Brasil. *Cadernos De Pesquisa*, 40(140), 445–477. <https://doi.org/10.1590/s0100-15742010000200008>
- Scruton, R. (1996). The eclipse of listening. *The New Criterion*, 15(30), 5-13.