

TEACHER TRAINING AND CRITICAL CITIZENSHIP: 1ST ENVIRONMENTAL CONFERENCE OF TECHNICAL EDUCATION OF THE FEDERAL INSTITUTE OF ESPÍRITO SANTO - CAMPUS ALEGRE



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ABSTRACT

The teaching-learning process requires trained teachers, since it is intrinsically linked to the construction of critical citizens. In this way, the internship becomes a fundamental piece for the development of teachers in the degree course. Given the current environmental issues, it is of fundamental importance to strengthen environmental education in schools. In this context, the present study aims to present the project that was developed with the students of the 1st year of High School at the Federal Institute of Espírito Santo – Campus Alegre, during the internship period of the students of the Degree in Biological Sciences, aiming at the development of environmental education. The project included presentations on topics related to current environmental problems, the reading of the manifesto, a critical exhibition and the presence of professors invited to the round table. The students were actively involved in the process, with the freedom to express their creativity and take the lead in their own learning. In addition, this stage was also fundamental for the development of teachers in training.

Keywords: Environmental Education. Teaching. Middle school.

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INTRODUCTION

Paulo Freire (2004), in his book "Pedagogy of Autonomy", emphasizes the need for a society that actively seeks to transform its reality, instead of simply observing existing problems. Araujo, Braga and Venancio (2022), argue about the importance of the internship in the teacher training process, because at this time teachers in training can develop and improve their skills and competencies.

In this context, it is essential that, throughout the teaching-learning process, teachers seek strategies that allow students to develop their skills of interpretation, investigation, problem solving, reflection and, above all, critical analysis. This implies avoiding the strictly theoretical approach, in which the student is limited to being a mere receiver of information (ALFFONSO, 2019).

Thus, it is essential to develop competent educators who have a deep understanding and who value the uniqueness of each student, thus avoiding treating them as beings devoid of knowledge. Therefore, the realization of internships during teacher training becomes a fundamental piece, providing the practical experience of these principles (BERNARDY; PAZ, 2012).

In view of the world scenario marked by environmental catastrophes, it is necessary that environmental education be strengthened in schools, seeking to provide reflection and awareness on current environmental issues. Bortolon and Mendes (2014) point out that "critical analysis can contribute profoundly to changes in values about caring for the environment".

The National Curriculum Parameters (PCN's) emphasize that the most effective approach to work on environmental education is through interdisciplinarity, that is, the integration between different disciplines, aiming to understand a certain subject from different perspectives. Narcizo (2012) highlights the need to work and develop environmental awareness, suggesting environmental education projects as an efficient way to address this theme through interdisciplinarity. According to the author, these "can and should be developed in schools in order to foster the creativity and reasoning of students, through dynamic and participatory activities, combining theory with practice".

The present study aims to present the project carried out with students of the 1st year of technical courses integrated to high school at the Federal Institute of Espírito Santo – Campus Alegre, which aimed to promote environmental awareness and reflection through Environmental Education. The project used interdisciplinarity, placing the student

as the protagonist in the teaching-learning process, with the teacher and future teachers acting as facilitators of this process. In addition, to highlight the relevance of this event both in terms of the training of future teachers involved and the preparation of future citizens.

METHODOLOGY

Students of the Degree in Biological Sciences at IFES - Alegre, during their Supervised Internship, participated in Biology classes in the 1st year of technical courses integrated with high school, taught by Professor Diego Ceolin. Together, they discussed teaching projects to close the Ecology theme, with the aim of involving students and making them protagonists of the project. The idea arose to hold the 1st Environmental Conference of Technical Education of IFES, with themes on contemporary environmental issues, interdisciplinary and involving the disciplines of Geography and Portuguese Language.

The themes were selected by the team and assigned to each class, with each undergraduate student acting as a tutor. The project included presentations, a critical exhibition with models and posters, and the elaboration and reading of a manifesto. The last stage had the collaboration of Portuguese language teachers and aimed to promote the development of students' critical sense, going beyond ecological issues to become a political act.

In all, there were 6 classes, 4 of which were from the Integrated Technician in Agriculture (TAI), 1 from the Integrated Technician in Computer Science (IT) and 1 from the Integrated Technician in Agroindustry (TGI). The classes had autonomy and were divided into subgroups with specific activities such as the preparation of slides, material for critical exposition, the manifesto, material research and presentation.

The outline of the event began to be drawn in June 2023, but took place on September 12 and 13 of the same year, with the following schedule:

Table 1 – Event schedule.

| Programming | | |
|-------------|--|-----------------------|
| Timetable | 12/09/2023 (Day 1) | 13/09/2023 (Day 2) |
| 10 am | Aperture | - |
| 10:30 a.m. | Climate Change and Agricultural Production – 1st TAI I | - |
| 11:40 a.m. | Lunch | - |

| | | |
|------------|--|---|
| 12:40 p.m. | Clean Energy: Potentialities in Brazil – TAI II | Electric vehicles: Cleaner future? – 1st TI |
| 1:40 p.m. | Socio-environmental impacts of mineral exploration in Brazil – 1st TAI III | Plastic Waste in the Oceans: Perspectives and Solutions – 1st TGI |
| 2:40 p.m. | Interval | Interval |
| 3:10 p.m. | Challenges in Sustainable Agriculture | Round table: Environmental Education and Sustainability (NEA – Center for Environmental Education of the Federal Institute of Espírito Santo – Campus Alegre) |
| 4:10 p.m. | Reading of the manifestos | |

Source: the authors.

The conference took place in the auditorium of the Federal Institute of Espírito Santo, with the presence of all classes simultaneously. For the presentations, it had the support of slides and, in certain situations, videos produced by the students themselves. These videos included interviews with professors on campus and materials from social networks. After each presentation (30 to 40 minutes), 20 minutes were allocated to clarify questions. As for the critical exhibition, the students presented a variety of elements, such as paintings, posters, models and even a newspaper created by the class itself.

RESULTS

During the process of preparation for the event and the presentations, several talents were identified among the students, both in terms of speech ability and resourcefulness, as well as in relation to creativity and the artistic aspect demonstrated in the preparation of materials for the critical exhibition.

In addition, over the two days, a wide variety of topics were covered, and students showed interest by asking questions at the end of each presentation. The vast majority of the groups presented knowledge about the topics addressed, answering the questions with confidence.

Figure 1 – Presenters of the 1st TAI I class.



Source: IFES, 2023.

Figure 2 – Critical Presentation of the 1st TGI class.



Source: IFES, 2023.

It is worth mentioning that, due to the positive results obtained for the discipline, the interns and the students, the event was incorporated into the institution's calendar. The conference will be held annually in the first semester, with the responsibility of organization in charge of students who are in the 1st year of technical courses integrated with high school.

DISCUSSION

According to Paulo Freire (2004), "Whoever teaches learns by teaching. And those who learn teach by learning". In this context, it is possible to say that this experience was fundamental for the development of future teachers, since it provided them with the opportunity to have a first contact with a group of students, allowing them to apply the knowledge acquired throughout the course.

In addition, the effectiveness of Freire's pedagogy becomes evident, given that, in this process, the students became authors of their own knowledge. The teachers in training played the role of guiding, guiding and, at the same time, stimulating and granting freedom so that the students could explore creativity and exercise critical thinking.

Therefore, the internship plays a crucial role in the training of future teachers, as it provides them with the opportunity to improve their capacity for reflection and acquire practical knowledge about the challenges faced in the field of education and in the school reality. Since teachers have the responsibility of shaping the future of citizens in training, it is necessary that they be adequately prepared to exercise the profession (BORSSOI, 2008).

The conception that the school should forge individuals endowed with critical thinking, capable of catalyzing changes in society, is highlighted. Events like this, which promote environmental awareness, become extremely relevant in a world lacking people who prioritize the environment. These contribute to the construction of knowledge, allowing

the learner to become an active agent (LOUREIRO et al., 2016). In addition, it goes beyond the concept of conventional education, in which the educator holds unquestionable authority in the classroom and limits himself to transmitting knowledge to the students, without actively fostering the passive acceptance of information.

As pointed out by Munhoz et al. (2012), in order to effect a transformation in reality, it is essential to start with the school environment, in order to build a new paradigm of citizenship. This process requires the implementation of modest initiatives. In this context, actions like this can contribute significantly to the formation of conscious citizens, oriented towards a sustainable future, starting to attribute value to the environment in which they live by assuming the role of transforming agents.

CONCLUSION

The path to building critical citizens begins in the classroom, where educators play a central role in shaping minds capable of understanding, questioning, and acting for the common good. In view of the above, it can be inferred that the conference is an opportunity to promote environmental education and encourage students to improve their skills and critical thinking. Thus, this initiative also plays an important role in the preparation of future teachers.

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