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Sustainable Development Goals (SDGs): Approaches and practices with the school community on healthy, sustainable and inclusive spaces

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ABSTRACT

The article intends to analyze approaches and practices of a social inclusion project developed among graduates and students from a technical school (ETEC) in the western zone of the city of São Paulo. The aforementioned project aimed at fostering shared and interdisciplinary construction of diverse knowledge and actions related to the 2030 Agenda, with the expectation of contributing to recognizing challenges in creating more sustainable, healthy and inclusive spaces within the school environment, as well as intervention possibilities in the territory. Based on the Research Itinerary developed by Paulo Freire, the Culture Circles, the project involved conducting workshops and training seminars led by graduates guided by PhD professors, in three stages: thematic investigation, coding/decoding, and critical unveiling. The initiative emerges as a response to society's growing demands for solutions to complex problems, contributing to the education of more conscious and engaged citizens, as well as professionals better prepared to deal with current issues. At the end of the project, while challenges were observed regarding the resources and spaces used for the meetings, it was also noticed that the ETEC students were able to make qualified observations and adopt an active stance towards the constructed space. Likewise, the graduates were able to link their individual research to the emerging socio-environmental demands present in the 2030 Agenda, strengthening active listening in light of the ecology of knowledge.

KEYWORDS: 2030 Agenda. Culture Circles. Social Inclusion.

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1 INTRODUCTION

The complexity, uncertainties and urgency of actions in the face of current socio-environmental and health problems demand collaborative thinking and action, integrating diverse knowledge and practices built from life experiences with those produced within the university (GIATTI et al., 2021). The current article aims at reporting and analyzing activities carried out within a social integration project. This project involves both students and professors from a graduate program in Architecture and Urban Planning, as well as first-year students from an integrated full-time secondary and technical education program, specializing in building construction.

A building technician is a professional that develops and carries out activities in the construction industry, a sector of great economic importance due to its contribution to job creation and Gross Domestic Product (GDP). However, they are also responsible for a significant environmental impact arising from extraction of natural resources, waste, and pollution resulting from their activities. Therefore, professionals in this productive sector play a strategic role in the discussions and practices related to socio-ecological agendas, especially those brought together in the 2030 Agenda. Such action plan, formulated by the United Nations (UN) in 2015 through 17 Sustainable Development Goals (SDGs) and 169 targets, calls on all countries to engage in eradicating hunger, reducing inequalities, expanding access to sanitation, building more sustainable cities and addressing climate change, among other aspects, in the pursuit of better living conditions on the planet (UN, 2015).

The aforementioned project was developed at a public technical school (ETEC) in the western zone of the city of São Paulo, situated in an area well-served by urban infrastructure. The project participants, students aged between 14 and 16 years old, attended school on a full-time basis, and many of them lived in other, sometimes less developed areas, traveling long distances every day through public transportation, exposed to time-consuming and costly commutes that exerted a negative impact on their learning (TIGRE, SAMPAIO and MENEZES, 2017). The not uncommon disparity between the school environment and the socio-spatial context in which they live has given rise to countless concerns. Similarly, the discipline chosen to host the activities, "Feasibility Studies and Technical and Economic Planning in Civil Construction I", eased dialogues between different study areas such as Environmental Health, Citizenship and the Climate Crisis, topics that are in line with the 2030 Agenda and were structured in this project around three axes: healthy, inclusive, and sustainable spaces.

It is noted that all the stimulated reflections emerged from the articulation between the ongoing research of the graduate students who were part of the project and the knowledge and incitement of the ETEC students, based on diverse experiences and evolving technical expertise. As a social inclusion project, a form of extension program within *stricto sensu* graduate programs, it is not only, as Boufleuer (2009, p. 374) suggests, about "imparting knowledge or technique but also, and especially, as willingness to learn from the action carried out in the form of feedback to research and teaching". Thus, a social insertion activity that aims at overcoming an approach based on simple assistance and diffusionism, in which "the other is the ignorant person who must learn what is up to them" (MARINHO et al., 2019, p. 129-130), it needs to be guided by "construction of a third knowledge, not of one or others, but constructed" (MARINHO et al., 2019, p. 131). It involves bringing to the surface a dialogic interaction, mutual construction, active and ongoing, a "transformative action [of the subject] on reality" (FREIRE, 1992, p.27).

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2 OBJECTIVES

This article proposes to report and analyze activities developed through the Social Insertion Project called "The 2030 Agenda and the Sustainable Development Goals (SDGs): Approaches and practices within the School Community", whose objectives were as follows: (I) Raise awareness among High School students enrolled in integrated technical building courses about the importance of sustainable development, aiming to educate more conscious citizens and professionals who are aware of the challenges in building healthy, inclusive and sustainable cities; (II) Collaboratively identify the main challenges to sustainability and social inclusion in the school environment, as well as intervention opportunities in the territory; (III) Contribute to incorporating diverse knowledge and practices related to the SDGs by encouraging dialogue and critical reflection; and (IV) Train the project participants, both technical school students and graduate students, to use participatory techniques for diagnosing and intervening in the environment constructed.

3 METHODOLOGY

The Project's activities were designed and structured based on the Research Itinerary developed by Paulo Freire: the Culture Circles. For the educator, education is both an act of love and courage, which involves vigorously facing discussions about the reality around us (FREIRE, 2020). As advocated by Freire, liberating education is a circular process because "starting from the coding of reality, the learner proceeds to decode it in order to recode it". Therefore, it is a reflective and participatory space [in which] the being is recognized as an individuality within the collective" (CAVALCANTE, 2008, p. 105). It also recognizes the existence of an ecology of knowledge, that is, "the inexhaustible epistemological diversity of the world [...], the existence of a plurality of forms of knowledge beyond scientific knowledge" (SANTOS, 2007, pp. 85-86). In short, it is about thinking of "knowledge as an intervention in reality, not as a representation" (SANTOS, 2007, p. 88).

Although they have been developed with certain variety, Culture Circles are commonly carried out through three dialectical and intertwined stages, which were proposed in elaboration and development of the project. The first stage consists of "Thematic Research", that is, the survey of generating topics that represent the expectations and shared interests of the group (FREIRE, 2020; SAUPE, 1997). Regarding the project, this stage corresponded to the first in-person workshop, during which the students were asked to individually answer on cards to the following question: "Which are the main challenges for healthier, inclusive and sustainable practices at school?" Subsequently, the cards were collaboratively grouped together, followed by a discussion circle aimed at mapping the group's understanding of the local and immediate reality, providing support for the definition of topics to be addressed and explored later on.

The second moment of the Circle refers to "Coding/Decoding" the generating topics, in an investigation, problematization and critical analysis process (FREIRE, 2020; SAUPE, 1997). In the scope of the project, it was about considering why the challenges identified in the first workshop existed, based on three training seminars conducted by graduate students, in a hybrid format. Topics related to the school environment were addressed and, as the course progressed, they were expanded to the territorial scale when opportunities arose. Each seminar covered one axis: healthy spaces, inclusive spaces, and sustainable spaces.

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The final stage of the Circle was "Critical Unveiling", involving shared responsibility for the challenges identified and the co-production of new knowledge and practices (FREIRE, 2020; SAUPE, 1997). This stage consisted of the second workshop in which, based on the discussions from previous meetings, the ETEC students organized themselves into three groups and, over the course of a week, developed action strategies to promote healthier, more inclusive and sustainable spaces from the Climate Crisis perspective, spanning from the territorial scale to housing. At the end, the students were able to present their ideas and debate them collectively.

4 RESULTS AND DISCUSSION

The social inclusion project took place between April and June 2023 and the activities developed were organized into three types, namely: planning; preparation of training content; and meetings at the ETEC. Five planning meetings were held virtually between the graduate students and the responsible teachers, always prior to the ETEC meetings. The purposes of these meetings were to identify weaknesses and opportunities, adapt the project to emerging demands, and assess possibilities for aligning the topics addressed by the students with the curriculum content specified in the technical discipline. The educational contents were prepared through virtual collaborative production tools, easing the students' interaction during the seminar development process. Finally, the meetings at the ETEC, each one lasting approximately two hours, consisted of two workshops, one held in early May and the other at the end of June, and three training seminars that took place during the weeks between the workshops. It is also worth noting that a preliminary meeting was held at the end of April with the principal and other staff members of the ETEC. During this meeting, there was an opportunity to engage in a dialogue about the expectations regarding the project, both from the initiative's proponents and the school community, while also getting to know the school's facilities.

4.1 First workshop: Sustainable, healthy and inclusive school space

Aimed at conducting the "thematic investigation", the first workshop was held in person with students from the ETEC, which eased exchanging ideas and discussions. The purpose was to present the initiative, its participants and driving axes. Foundation of the project was built through an activity that required the students to individually answer, using cards provided by the graduate students, to the following question: "Which are the main challenges for healthier, inclusive and sustainable practices at school?" It was decided not to conceptualize each of these three axes, with the aim of not biasing the participants' answers. The minimum or maximum number of cards that each person could use was also not limited.

After the students had filled out their cards, these were placed on a table in the center of the room [Figure 1], allowing them to group the points raised according to convergences into collectively defined topics. The students defined five thematic groupings [Chart 1], namely: "Everything is fine", "Inclusion", "Relationship", "Infrastructure" and "Lack of projects". To justify and clarify the groupings, the students selected a spokesperson for each generating topic (thematic grouping). The first grouping, "Everything is fine", represented the failure to identify problems in the school environment.

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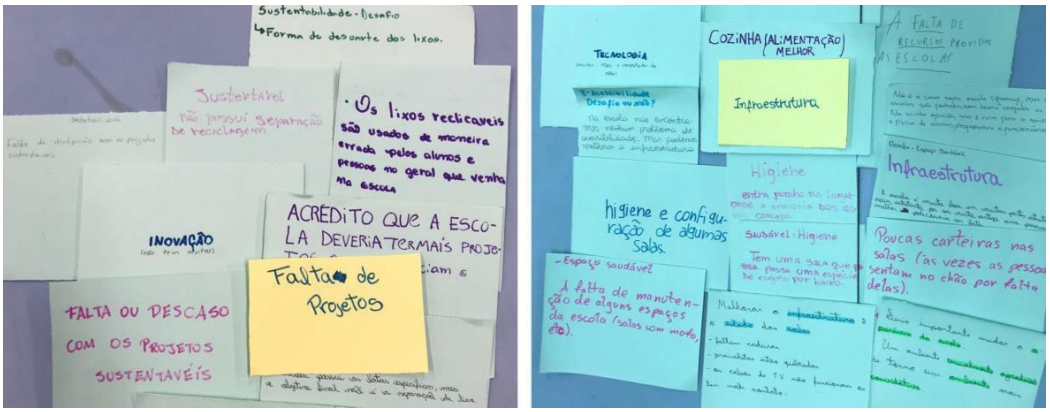
Figure 1 - Groupings of the cards under the "Lack of projects" and "Infrastructure" topics



Source: The authors, 2023.

Chart 1 - Students' answers about the challenges for more inclusive, healthy and sustainable practices at school

Grouping	Number		Central issue	Highlights
Everything is fine	2		(Non)existence of problems	• "For me, the school is accessible, it's a healthy place, and it includes its students. I have nothing to complain about."
Inclusion	9	3	Support for people with disabilities	• "Lack of PWD [at school]." • "The ramps we have at the school are not functional for people in wheelchairs."
		5	Psychopedagogical support	• "[Difficulty keeping up with] the pace of study, with little time to assimilate and ask questions about the content." • "At school, it can sometimes be difficult to find a place where you feel included. But to find that place we need to find people who support our decisions."
		1	Material support	• "School supplies [are] very expensive."
Relationship	9	3	Students	• "[The] students [should] keep the school clean."
		3	Faculty	• "More commitment from the educators."
		3	School community	• "It is not possible to have inclusion without dialogue among everyone: students among themselves, teachers among themselves, employees among themselves, and among all at the same time."
Infrastructure	16	6	Hygiene and health	• "[Improve the] hygiene and configuration of some rooms." • "Pigeons enter the place where most students eat." • "Kitchen: food [could be] better."
		2	Belonging and well-being	• "It would be important to change the appearance of the school. An environment that is visually pleasing becomes more inviting."
		8	Maintenance and resources	• "Improve the infrastructure and the condition of the rooms: there are no chairs, the clipboards are broken, the TV cables don't work or have poor contact." • "The school is good in many structural parts; however, as it is very old, better preservation should have been done."
Lack of projects	9	4	(Non)existence of initiatives	• "There is no recycling separation." • "Recycling: the school has specific bins, but the final goal is not waste separation."
		2	Disclosure and awareness	• "[The] recyclable waste bins are used incorrectly by students and people, in general, who come to the school."
		3	Adherence to demands	• "I believe that the school should have more projects that benefit the students."

Source: The authors, 2023

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The second grouping, "Inclusion", identified lack of accessibility and people with disabilities (PWD) in the school, stating in their report that when they saw a classmate in a wheelchair, it was because they had fractured their leg. This led them to reflect on whether the absence of these individuals at the school is due to inadequacy of the accessibility conditions or to lack of inclusive entrance exams. Furthermore, the absence of psychological support for students was highlighted, as well as the discomfort caused to lower-income individuals by the high cost of the materials used in technical disciplines, leading them to opt for lower-quality alternatives.

The third thematic grouping, "Relationships", detected disrespectful behaviors by peers and criticized some teachers' irregular attendance, as well as the format of the classes and assignment submissions. However, during the dialogue some of the students recognized that improvements in relationships depend on joint efforts by both students and teachers to reduce tension.

The fourth group, "Infrastructure", was expressed by the discomfort with the presence of pigeons near the cafeteria, as well as the desire for better meals. In the Culture Circle, the students also pointed out that the building's infrastructure suffers from insufficient maintenance, with classrooms presenting infiltrations and mold, and broken furniture. In addition to that, aspects related to lighting and ventilation were also mentioned.

The fifth thematic grouping, "Lack of projects", highlighted that initiatives were either non-existent or had little participation, such as a project to collect batteries, unexplored by the students. Similarly to what happened, according to reports in the Culture Circle, with projects related to sustainability, which were not continued due to lack of dissemination and dialogue with the students' interests. As an example, they also mentioned a project for a fountain created by the technical course in Environmental Science, which, however, had been abandoned. At the end, Teacher A[1] asked if everyone agreed and if they had noticed any leadership qualities during the activity. The students mentioned two colleagues and that all interested parties had participated. Subsequently, Teacher A asked "Which was the cause of the problems identified?". The first answer given was that the government was the main "culprit". Teacher B then provoked them by asking "Who this government was and how to demand and reverse this". Then the students pointed out mobilization of society to demand government action as one of the solutions, as well as conscious voting.

4.2 Training seminars: Problematizing the generating topics

In this stage, based on these thematic groupings and the discussions that took place during the conversation circle, seminars were conducted on topics related to the 2030 Agenda and to healthy, inclusive and sustainable spaces [Chart 2], with the aim of promoting the coding/decoding of certain generating topics, problematizing them. The meetings were conducted in rooms or laboratories with Internet access, display screens and projectors. They featured presentations by graduate students, either in person or virtually, with Student-Teacher A mediating between the students and digital resources. Each seminar was followed by questions that aimed at stimulating interaction and reflection.

[1] To protect anonymity, the individuals responsible for the project were referred to as Teachers A and B, and the graduate students who conducted the workshops and seminars were designated as Students A, B, C, D and E. An exception was made for Student-Teacher A, as she was both a graduate student in the program and a teacher at the technical school.

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Chart 2 - Topics covered in the training seminars

Axis	Student	Main SDG	Topics addressed
Healthy Spaces	Student A (PhD student)	**SDG 3**: Good Health and Well-Being	2030 Agenda; Socio-environmental determinants of health; Lighting, health and self-construction.
Inclusive Spaces	Student B (MSc student)	**SDG 16**: Peace, Justice and Strong Institutions	Public policies; Citizenship; Importance of voting; Tripartition and spheres of powers.
	Student-Teacher A (PhD student)	**SDG 4**: Quality Education	Inclusion in the school space; Accessibility; Healthy school spaces.
Sustainable Spaces	Student C (MSc student)	**SDG 13:** Combatting Climate Change	Climate crisis; Extreme events; Disaster risk reduction; Socio-environmental justice.
	Student D (MSc student)	**SDG 11:** Sustainable Cities and Communities	Urban segregation; Housing precariousness; Commuting between home, work and school.
	Student E (MSc student)	**SDG 12:** Responsible Consumption and Production	Clean energy sources; Renewable construction materials; Carbon sequestration.

Source: The authors, 2023

4.2.1 First seminar: Healthy spaces

The first seminar discussed healthy spaces and was organized by Student A, present remotely. As introduction, he used a video from the IBGE (2016) addressing the 2030 Agenda and, subsequently, with the help of images, he briefly presented each of the 17 SDGs, discussing them from three dimensions: Environmental, Social, and Economic (UN, 2015).

Afterwards, Student A explained that his seminar would focus on SDG 3 - Health and Well-Being, and asked the students the following question: "What is health?" The answers were as follows: "mental health"; "physical well-being"; "peak of the good thing"; "being happy"; "being in a good mind and body"; "being able to do basic things"; "being well with oneself"; "being at peace with life"; "feeling good in all aspects"; "not being hateful"; "guaranteeing emotional stability"; and "being well physically and emotionally". Student A observed that the students' answers were close to a contemporary view of the concept of health, not limited to the biomedical definition, in which "being healthy is not being sick". Subsequently, the idea of socio-environmental determinants of health was discussed, laid out in the Dahlgren and Whitehead Model (1991), which considers health as also vulnerable to socioeconomic, cultural and environmental conditions (BUSS and PELLEGRINI FILHO, 2007; CNDSS, 2008).

In the last part of the presentation, to elucidate the socio-environmental impacts on health, Student A reflected on the research by Mendes, Sígolo and Toledo (2021), which investigates the influence of inadequate lighting on the health of people living in self-built homes. This discussion was also the subject of an activity proposed by Student-Teacher A as part of the regular course curriculum. She asked the students to conduct a critical observation of the neighborhood where they live, thus creating connections between the social inclusion project and the course's curricular content. The topic of self-built housing was a novelty for the students at that time, while the discipline aimed at clarifying the importance of urban and construction parameters for public health.

It is important to note that the first seminar was held in the school's computer laboratory, which was built with drywall and located near the sports court. This context was unfavorable for the acoustic quality of the environment, with the noise from physical

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education classes reaching the laboratory and making it difficult to understand the Student A 's presentation. Furthermore, the computers used by the students had synchronization problems, compromising communication, especially at the beginning of the meeting. It is also noted that the seminar took place early in the afternoon, immediately after lunchtime, when the students usually return to activities feeling somewhat dispersed and drowsy. The difficulties encountered during the meeting highlight the challenges faced in the school during synchronous digital activities.

4.2.2 Second seminar: Inclusive spaces

The second seminar, organized by Student B and Student-Teacher A, focused on inclusive spaces and took place in a classroom equipped with a monitor and Internet access. This classroom was located in a masonry building and was distant from the sports court to avoid the issues experienced during the previous seminar. However, the teachers' participation in the strike for better working conditions resulted in the absence of many students. The atmosphere of demanding rights, combined with dissatisfaction over the cancellation of the urban afforestation lecture (in celebration of the World Environment Day), sparked questions that contributed to the discussion. Teacher B took the opportunity to revisit the topics previously covered, reflecting on: "the role of natural lighting and ventilation, especially in the school environment"; "the relevance of a qualified view of the built environment and its implications for health and emotional well-being"; and "the impacts of urban afforestation on public health".

Reverberating SDG 16 - Peace, Justice and Strong Institutions, the media prepared by Student B, who was unable to participate in person, was reproduced. The first part of the recording presented a video produced by the Congress (BRAZIL, 2016), which explains "what citizenship is". Later on, in the recording, Student B clarified "what public policies are"; "what the political powers of the Federative Republic of Brazil are"; "what councilors, state and federal deputies do"; and "the importance of voting". The entire discussion was aligned with the concept of citizenship in Milton Santos' work, for whom a "complete individual is one who has the ability to understand the world, their place in it and, even if they are not yet a citizen, knows what their rights could be" (SANTOS, 1997, p. 133).

After presenting the media, Student-Teacher A elucidated the importance of inclusive school spaces, reflecting the concerns of SDG 4 - Quality Education. She argued that inclusion is recognizing the right to be different (PESARO, KUPFER and MERLETTI, 2017), that full and universal accessibility is a condition for a good quality schools (KOWALTOWSKI, 2011), and that the students' development, in their diversity, as argued by Bezerra, Toledo and Sígolo (2023, p. 124), "depends on healthy spaces where conditions for access, effective stay, safety and participation are guaranteed, allowing different teaching and learning dynamics to occur without discrimination".

In the end, as part of the tasks in the course, the students were assigned a qualified observation activity regarding the school space as a social and learning environment. The seminar on citizenship and inclusion, as well as the exercise proposed, eased a broader discussion about the role of the school community, encouraging decoding of the students' ideas. In the first workshop, the students identified the faculty and the school administration as the main "culprits" for the institution's problems, right after the government. However, they

did not reflect on the working conditions or on access to resources for the staff members. It was an effort to shift the students' "vocabulary universe" (FREIRE, 2020), which was predominantly focused on the territory of blame, towards that of (co)responsibility (YOUNG, 2011).

4.2.3 Third seminar: Sustainable spaces

The last seminar worked on the topic of sustainability and of the space built, based on the uncertainties brought about by the climate emergency. The subjects in charge of this meeting were Students C, D and E, who addressed the topic on three scales: territory, city, and building. The technical school principal also attended the presentation and made several interventions that contributed to clarifying doubts and advancing the discussions.

The scale of the territory was explored by Student C, who focused on examining the targets included in SDG 13 - Combating Climate Change. The presentation began by defining the concept of Climate Emergency and presenting the findings of the Intergovernmental Panel on Climate Change - IPCC (2021), which attributed the primary responsibility for climate change to anthropogenic greenhouse gas emissions (GHGs). Further on, Student C asserted that, among the most deadly and destructive effects of climate change are natural disasters, classified as geological, hydrological, meteorological, climatological and biological (BRAZIL, 2012). He further explained that, especially in metropolises, there are large populations occupying environmentally fragile areas and exposed to natural risks, whose current vulnerability will increase exponentially with the effects of the climate crisis (JACOBI, 2013). Student C argued that, although climate change affects everyone, the impacts are experienced in a very unequal way, in which the poorest, also the smallest GHG emitters, are those who suffer most from extreme events, while the richest people, the largest GHG emitters, have the best conditions for adaptation and resilience (GORE, 2020). Finally, he highlighted that this inequality led to struggles for climate justice emerging across the planet (TORRES, 2021).

Subsequently, Student D explored the urban scale, mainly reflecting in the targets included in SDG 11 - Sustainable Cities and Communities, but also SDG 1 - Eradication of Poverty and SDG 10 - Reducing Inequalities. He argued that it is impossible to achieve sustainable development without universal access to decent housing and basic sanitation, without job creation, and with food insecurity (MOREIRA and SÍGOLO, 2023). He also emphasized that urban sprawl and the distance between houses, workplaces and schools increase commuting, leading to higher GHG emissions and, consequently, exacerbating climate change. However, Student D pointed out that socio-spatial segregation is not only environmentally harmful but also a driver of the production and reproduction of socioeconomic inequalities in Capitalism. As Villaça (2012) suggests, it turns prime locations into privileges of the elites and, as Rolnik (2019) further elaborates, it divides the city into income landscapes where the elite lives and consumes, and life landscapes, "constructed by and for the majority, based on the survival logic" (ROLNIK, 2019, p. 26). At the end, the study conducted by Moreira and Sígolo (2023) about the *Campos Elíseos* neighborhood in São Paulo was presented, highlighting the challenges in accessing adequate housing for the local low-income population, showing that socio-spatial segregation is also a reality in central regions.

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The third scale, the one related to the building, was presented by Student E, who participated through a pre-recorded video, discussing topics related to SDG 7 - Clean and Affordable Energy and SDG 12 - Responsible Consumption and Production. First, he dedicated himself to discussing the different energy sources and their environmental impact. Later on, he specifically addressed civil construction, clarifying that one of the most used indicators to measure the impact of a building is embodied carbon, understood as the "sum of the impact of all greenhouse gas emissions attributed to a material throughout its life cycle" (SOUZA, 2021, p. 1), whose quantification, among other methodologies, is carried out by the Life Cycle Assessment (LCA), which analyzes the product from cradle to grave (COELHO FILHO, SACCARO JUNIOR and LUEDEMANN, 2016). Student E also contributed quantitative data on the mean embodied carbon of each of the three main structural materials, arguing that, unlike steel and concrete, wood sequesters CO_2 (DIAS, 2022).

Interested in the topic, the students asked whether using wood in construction might exert a negative impact if extraction of this material exceeded to planting. The doubts were addressed by Teacher A, stating that there will be environmental impact in any construction method, but that we must mitigate it by considering the entire material cycle, from extraction to disposal or reuse.

At the end of the meeting, the students were asked to organize themselves into three groups and, for a week, think about strategies for the following questions: "How to support the most vulnerable social groups and guarantee climate justice? How to reduce socio-spatial segregation through housing and how to rethink the distance between houses and schools/workplaces? Which strategies can we adopt so that waste from our cities exerts a lower impact on the environment?" The questions aimed at accommodating evolution of the project, towards critical unveiling, and of the discipline, as the discussions, initially focused on the local and immediate scale of the school, included the city scale during the meetings. It was proposed that the delivery be made in poster format and that both the content and presentation should be free, with the possibility of using drawings, rhymes, skits, etc.

4.3 Second workshop: (Re)thinking the territory towards critical unveiling

The last workshop continued the proposals, based on the three questions raised in the previous meeting. In addition to exposing the ideas produced by the three groups, it was sought to listen to students' feedback regarding the project. The first third of the meeting was devoted to completing the posters [Figure 2] and to the final internal discussions within the groups.

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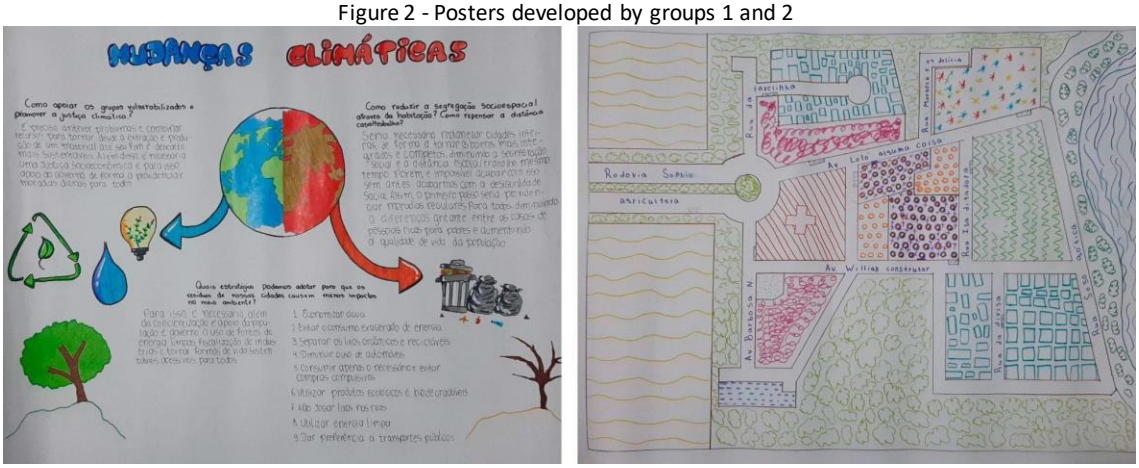
Figure 2 - Posters developed by groups 1 and 2



Source: The authors, 2023.

Once the proposals were finished, Group 1 began its presentation, displaying a poster whose central image illustrated planet Earth divided between renewal and destruction, two possible paths to be taken in the face of climate change. Regarding the issue of vulnerable populations and climate justice, they advocated the importance of anticipating problems and planning with different prospects. For the topic of socio-spatial segregation, they proposed rethinking cities as a whole, designing small and complete neighborhoods, where housing and economic activity coexist and the State guarantees access to housing and basic sanitation for all, reducing the distance between the rich and poor. The third question, about renewable materials and waste management, was discussed based on the argument to build only what is necessary, use biodegradable materials, expand recycling systems, prioritize public transportation and reduce car use, avoid littering in the streets, conserve water, and support sustainable and clean energy for all.

Subsequently, it was time for Group 2's presentation. Two posters were created, the first one with the plan of an urban proposal and the second with the description of the solutions developed. Starting from a hypothetical rural city, they argued that subdivisions or constructions that required deforestation for their implementation should reuse the extracted wood in urban furniture, and that land cuts, when carried out, should prioritize reallocating the removed soil on the lot itself or nearby. They believe that, with these guidelines, they might promote sustainable spaces and environmental justice. Regarding the housing issue, they advocated resettlement of residents from the outskirts, particularly those who occupy risk areas, to central areas, duly equipped with infrastructure. To this end, they demanded that the government support the populations during the process through temporary housing and cash assistance. As it was a hypothetical rural town dependent on tourism, the group proposed establishing a new commercial front for the sale of local produce. This new center would be surrounded by new schools and houses for the resettled population. Close to the schools, they thought about including a recycling center, which, in their perception, would favor environmental education projects.

Finally, Group 3 made the briefest presentation. Its members also prepared two posters: one titled "Climate Emergency" and the other, "Climate Agenda". In the first they expressed their proposals, arguing that, in order to support vulnerable groups and promote climate justice, it would be necessary to improve the existing public policies, shifting them so that they serve public interests beyond those of the richest groups. To address the socio-

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spatial segregation resulting from the house-workplace distance, they argued that reorganizing part of the road infrastructure and expanding the public transportation system, particularly the underground and railway, is more suitable than promoting large resettlements. Finally, with regard to waste management, they proposed universalizing garbage collection, as well as awareness programs on correct disposal. The second poster reflected on some of the main international commitments, such as the 2030 Agenda and the IPCC. In addition, in this last meeting of the project at the ETEC, the students were asked the following question: "How was your experience with the social inclusion project?" and "How do the questions addressed relate to the contents of the technical course in building construction?" Some of the students highlighted the importance that the topic of urban planning had for a critical perspective in relation to the city's problems. One student recalled that planning is not always effective in bringing housing closer to work, taking the Brasilia Pilot Plan as an example, where distances were designed to be covered by car. He also argued that even though Brasília was planned, it did not provide adequate housing for the workers involved in its construction, leading to the emergence of slums on the outskirts.

On the topic of segregation between housing and school, one of the students reported that he attended Elementary School close to his home, whereas now, in technical education, he is compelled to study much further away: 33 km. He also mentioned that his previous school was located near a slope at risk of landslides, and that studying at a technical school may have been a matter of choice, but it was driven by the prospect of a better professional future and a different reality from what he is currently experiencing.

Another group of students pointed out the subject of self-built housing as interesting and began to observe the same situations discussed in their neighborhood. One of the students emphasized her interest in research into the impacts of inadequate lighting and ventilation on the health of people living in self-built housing. She reported that little sunlight enters her home, unlike when she lived in the inland of the state of Minas Gerais, surrounded by vegetation and exposed to frequent sunlight. Another colleague added that her house is cold and poorly lit, constantly moldy and, consequently, worsening her rhinitis. One last student brought to the debate the importance of effective and sustainable waste management for public health.

5 FINAL CONSIDERATIONS

The project provided an opportunity for mutual learning since, on one hand, young individuals who are in the professional development process were able to engage with university and scientific research knowledge and practices. On the other hand, it allowed graduate students to connect with various life experiences and demands that are socially relevant. The students were encouraged to develop a qualified observation about the school environment, firstly, but also about the neighborhood, the city and, ultimately, about the future of the planet. Carried out through active listening and discussion between perceptions of the world, collaborative construction was the basis of this project, making dialogue the only possible path to action and political transformation. Therefore, the proposed activities, developed collectively, always led to students' interaction and group discussions, with exchanges of ideas, establishing spaces that might accommodate each person's singularities.

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This holistic view also extended to the topics discussed because the interdependence between inclusive, healthy and sustainable spaces makes it impossible to consider them in isolation.

The first activity was marked by the students' eagerness to express their opinions regarding the challenges identified, even though they themselves were not very interested in providing active listening. The vocabulary centered around blaming the ever-other, whether it be a member of the school community or the government, gradually gave way to citizenship, expressed through shared responsibility for the challenges encountered (YOUNG, 2011). It is important to highlight that this is a transformation in process, which requires continuous effort to achieve consistency. Hence, the involvement of the principal, coordinator, teachers and other staff members throughout the project was crucial, not only to begin easing the relationship with the students but also to enable the continuation of the reflective practice encouraged by the project, making them agents of dissemination. Teachers that miss their classes or schools with precarious infrastructure began to be seen above all as reproductions of more structural problems faced by public education, such as absence of decent working conditions and insufficient budgets. During the meetings, the graduate students also experienced the complexity inherent to the school space. They had to creatively elaborate the contents presented and remodel them, when necessary, to dialogue with the students' demands and gain their attention, so shaken by the exhaustion resulting from the long commute and full school hours. They also faced the school's material conditions, external noise and digital synchronization problems.

Based on the above, it is believed that the social inclusion experience presented in this article, in light of the 2030 Agenda, can contribute to reflections on counter-hegemonic approaches and practices within the school community, especially those centered on inclusive, healthy and sustainable development. By acknowledging the strengths and limitations herein addressed, the intention is to turn this initiative into a pilot project for further ventures with other groups, even if recognizing that each classroom, course and school has its own uniqueness and that entire project should be guided by the reflections and actions collectively built.

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