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Mobilization for access to drinking water in the school context with a focus on environmental education [1]

Mobilização pelo acesso à água potável no contexto escolar com foco na educação ambiental

Movilización por el acceso al agua potable en el contexto escolar con enfoque en la educación ambiental

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Abstract: This study aimed to analyze the process of creating a socio-environmental protection network at the Olegário Mariano State School (CEOM), located in the Rocha Miranda neighborhood of Rio de Janeiro. Through the methodology of Critical Environmental Education (CEE) and action research, the study sought to mobilize students in the search for solutions to the problems identified. High school students participated in training workshops and collaborated with residents living near the school in collecting data on water supply conditions in the region. The goal was to encourage students' participatory engagement in the Socio-environmental Protection Network. Student accounts indicated that participation in this type of social movement contributed to broadening their reflections on the reality surrounding them and fostered a sense of belonging to a group that collectively fights for a common cause and values the contribution of each participant.
Keywords*:* Critical environmental education; Water supply; Colégio Estadual Olegário Mariano; Student engagement.

Resumo: Este estudo teve como objetivo analisar o processo de criação de uma Rede de proteção socioambiental no Colégio Estadual Olegário Mariano (CEOM), no bairro de Rocha Miranda, na cidade do Rio de Janeiro. Por intermédio da Educação Ambiental Crítica (EAC) e da metodologia de pesquisa-ação buscou-se mobilizar os estudantes na busca de soluções para os problemas encontrados. Estudantes do Ensino Médio passaram por oficinas de capacitação e atuaram no levantamento de dados, junto aos moradores do entorno do Colégio,sobre as condições de abastecimento de água na região, objetivando motivar o engajamento de forma participativa dos estudantes na Rede de Proteção Socioambiental. Os relatos dos estudantes apontaram que participar desse tipo de movimento social, contribuiu para ampliar a reflexão sobre a realidade que os cerca, e

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estabeleceu um sentimento de pertencimento a um grupo que luta coletivamente por uma causa e valoriza a contribuição de cada participante.
Palavras-chave: Educação ambiental crítica; Abastecimento de água; Colégio Estadual Olegário Mariano; Engajamento estudantil.

Resumen: Este estudio tuvo como objetivo analizar el proceso de creación de una red de protección socioambiental en el Colegio Estatal Olegário Mariano (CEOM), ubicado en el barrio de Rocha Miranda, en Río de Janeiro, Brasil. Mediante la metodología de Educación Ambiental Crítica (EAC) y la investigación-acción, el estudio buscó movilizar al alumnado en la búsqueda de soluciones a los problemas detectados. Estudiantes de bachillerato participaron en talleres de formación y colaboraron en la recogida de datos, junto con residentes de las inmediaciones del colegio, sobre las condiciones del suministro de agua en la región. El objetivo fue fomentar la participación del alumnado en la Red de Protección Socioambiental. Los testimonios del alumnado indicaron que participar en este tipo de movimiento social contribuyó a ampliar su reflexión sobre la realidad que les rodea y favoreció el desarrollo de un sentimiento de pertenencia a un grupo que lucha colectivamente por una causa y valora la contribución de cada participante.
Palabras clave: Educación ambiental crítica; Suministro de agua; Colegio Estatal Olegário Mariano; Participación estudiantil.

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Introduction

Mobilization for access to potable water is fundamental to ensuring the universal right to this finite natural resource.

This article highlights the process of building a Socio-environmental Protection Network at the Olegário Mariano State School (CEOM), located in the northern zone of Rio de Janeiro, in the Rocha Miranda neighborhood, and examines how the students involved in this Network engaged with the issue of water shortages affecting a portion of residents living near the school they attend. The Network mapped the affected areas in the region to contribute to the search for solutions to this problem.

In Brazil, guaranteeing access to water, in addition to being enshrined in Article 21 of the Federal Constitution (BRASIL, 1988), is part of the country's commitments in multilateral forums. However, even with the creation of an institutional framework aligned with water resource legislation, the effectiveness of efforts to democratize access to drinking water remains well below expectations. There is still a lack of consistent dialogue with community leaders in the most affected regions, which hinders efforts to address local specificities in neighborhoods and municipalities.

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The research problem addressed in this study is whether the creation of a Socio-environmental Protection Network formed by students engaged in a process of critical environmental education can contribute to expanding access to drinking water.

Therefore, this study emphasizes how this Network contributed to student engagement in the search for solutions to problems related to access to drinking water within the community.

The theoretical framework focused on the concept of Critical Environmental Education to advocate for mobilization around the cause of drinking water that transcends the values of the Western colonizing mentality.

The methodology used to establish the Socio-environmental Protection Network consisted of the following steps: student selection, training workshops, mapping streets with inadequate water supply, publication of the Network's actions on social media, dissemination of the study's results at universities and other schools, analysis of the Network's expansion, and discussion of future perspectives.

The study aims to help public school students develop greater motivation to engage with public authorities regarding the demands of their community, thereby characterizing a model of activism.

Critical Environmental Education

Critical Environmental Education (CEE) opposes a conservative model of environmental education focused on transforming individual behavior and, therefore, characterized by an individualistic perspective.

CEE is guided by principles such as the humanization of the educational process, analysis grounded in each individual's way of being, emphasis on transformation as a means of confronting domination and exploitation, recognition that the logic of capital generates the exploitation of nature, and the collective construction, together with oppressed groups, of a specific framework.

According to Layrargues and Lima (2014), in practice, there are many possible paths **to** conceive and implement the means and goals of Environmental Education. One of these approaches emphasizes the need to contextualize environmental problems within their social and political dimensions.

Ramos, Azevedo, and Mello-Silva (2022) state that the critical approach to environmental education is based on the ideals of Paulo Freire and advocates understanding human beings as part of a global ecosystem encompassing social, economic, cultural, environmental, and cognitive dimensions. From this perspective, the planetary citizen must

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be critical and capable of transforming, as well as being transformed by, the reality in which they live. According to Freire's approach, schools must function as spaces that do not reproduce the ideology of the dominant classes, as generally occurs.

Paulo Freire (1993) also emphasizes the importance of interdisciplinarity in education by relating both the historical dimension (through time) and the geographical dimension (through space) to specific aspects of social, economic, psychological, cultural, and political reality. Interdisciplinarity is the methodological process of knowledge construction by the individual based on their relationship with context, reality, and culture.

According to Costa and Loureiro (2017), the political-pedagogical foundations of Freirean interdisciplinarity in critical environmental education support the adoption of political strategies oriented toward liberating logics that oppose hegemonic neoliberal logics, characteristic of the colonial matrix through which capitalism operates in Latin America and excessively degrades nature.

From the perspective of Paulo Freire, it is necessary to structure participatory processes that promote the overcoming of consolidated power relations and guarantee the exercise of citizenship, especially for those living in situations of greater socio-environmental vulnerability.

Dickman and Carneiro (2012) consider the human–world relationship to be a central theme in Freirean pedagogy, also grounded in an environmental relationship that enables an education focused on building a sense of belonging to the world and fostering ecological awareness that not only identifies problems but also reflects on sustainable alternatives for the living environment as a whole. To achieve this objective, the authors advocate valuing the historical-cultural dimension in order to transform individual and collective behaviors, thereby constructing an environmental citizenship capable of changing concrete reality.

Paulo Freire's Liberating and Critical Education, in addition to being interdisciplinary, is multidimensional, encompassing political, economic, social, ethical, and technological aspects. In this sense, "(...) it is up to humankind to have the ethical responsibility to care for the life of the Planet as a whole, to think about a new way of life regarding production, consumption, and social and environmental justice" (Dickman; Carneiro, 2012, p. 94).

We live in a world in which sustainability has been constantly debated in international forums; however, environmental preservation has not yet become an objective and widespread concern among the population in Brazil or globally. We understand that cultural and economic factors shape different ways of relating to the environment. Loureiro (2013) criticizes the naturalization of ways of being shaped by the immediacy imposed by capitalism, which, as a result of its constant competitiveness, devalues the knowledge of traditional communities that relate to nature at a different pace, one that places greater value on ancestry.

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The humanization of the educational process through the analysis of each individual's way of being, with an emphasis on transformation as a means of confronting domination and exploitation, is a key element of Critical Environmental Education. This perspective makes it possible to understand how the logic of capital generates the exploitation of nature while also causing developed nations to subordinate others. It also highlights that transformation requires collective construction alongside those oppressed by this entire process.

The concept of Environmental Education "(...) integrates educational proposals originating from distinct theoretical conceptions and ideological matrices" (LOUREIRO, 2005, p. 132). Different forms of application of this concept can be identified throughout history. According to Matos et al. (2020), the concept of Environmental Education (EE) has gradually evolved and overcome the dichotomy between human beings and nature. As a result, humanity has come to be regarded as an integral and inseparable part of the environment.

Critical Environmental Education is capable of generating interdisciplinary debates in schools because it is open to ethical, human, and political issues. In this sense, Costa and Loureiro (2024) emphasize that the pedagogy of environmental conflicts makes it possible to understand that environmental problems and issues are neither neutral nor easily solvable. The identification of an environmental problem must be accompanied by an understanding of its causal dynamics and the social agents involved. The authors further emphasize that "this politicizes education and demands that its subjects take a position regarding societal and sustainability projects. The need to take a position leads to a reflective practice of reality and to a complex understanding of responsibilities" (Costa; Loureiro, 2024, p. 9).

The study of critical environmental education within school curricula is highly important because "(...) the role of socio-environmental knowledge in school-life relations goes beyond the boundaries of sciences and their areas; of curricular components and classrooms – the deterritorialization of environmental knowledge is reflected in the 'breaking down' of school walls, that is, in the unenclosure of subjects" (Nogueira, 2020, p. 10).

Thus, it is necessary to value shared knowledge that transcends the traditional relationship in which the teacher is regarded as the sole holder of knowledge and students as passive recipients, because critical environmental education is grounded in local experience and in how individuals are affected by the environment, integrating knowledge in the search for solutions to confront the environmental degradation caused by society's way of life.

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Social mobilization to access constitutional rights

Social mobilization to access rights occurs through mechanisms that motivate people to engage with a cause. According to Toro and Werneck (1997), mobilization takes place when a group of people, a community, or a society decides to act toward a common objective, seeking, on a daily basis, results collectively decided upon and desired by all. In a mobilization process, people are invited rather than coerced; it is an act of choice.

A mobilized group views its cause as a long-term project rather than something temporary or fleeting.

> What gives stability to a social mobilization process is knowing that what I do and decide, in my daily field of action, is being done and decided by others, in their own fields of action, with the same purposes and meanings" (TORO; WERNECK, 1997, p. 5).

As highlighted by Mafra (2008), social mobilization calls upon individuals for collective involvement in a wide variety of causes, thus establishing an intrinsic relationship with contemporary democracies.

Mobilization certainly requires negotiating power and creating mechanisms capable of attracting members to the cause, but it also requires respect and patience in dealing with the difficulties that may arise throughout the process. Another important factor is identifying the elements that can help reach a target audience. In education, the act of collaboration involves shifting authority from the teacher to the student.

Santos (2024) highlights that, for Paulo Freire, collaboration is understood as the joint work of subjects engaged in dialogical action aimed at transforming the world. The author describes collaboration as teamwork in which participants perform tasks and support one another in carrying them out, without hierarchical relations among the subjects involved. Santos also emphasizes that a leader's humility in relinquishing a superior position and sharing responsibilities with other participants demonstrates solidarity and enables collaboration through dialogue.

The success of a mobilized social movement depends on "(...) the fulfillment of other functions that must be properly integrated and articulated, such as disseminating information, promoting collectivization, preserving memory, and providing elements of identification with the cause" (Henriques; Braga; Silva, 2007, p. 8).

The characteristics of communication within a social mobilization process must be aligned with an ethical proposal that is, above all, dialogical, liberating, and educational. We

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advocate here for a model of social mobilization capable of fostering new social dynamics and establishing networks that contribute to solving social problems that perpetuate inequality.

We recognize that this technique has also been appropriated by dominant groups; however, this is part of the dynamics of politics. The more collectives in disadvantaged conditions understand strategies for self-mobilization and apply them in their actions, the greater the possibility of developing public policies capable of addressing the real needs of population groups that lack access to basic rights.

The Establishment of the Socio-Environmental Network at CEOM

The Olegário Mariano State College (CEOM) is located in the northern zone of the city of Rio de Janeiro, in the Rocha Miranda neighborhood, at Praça das Esmeraldas, number 65. CEOM operates during the evening shift, as the school building is used by the municipal education network during the morning and afternoon shifts.

According to data registered with the Rio de Janeiro State Department of Education (SEEDUC, 2024), the school has 11 classrooms, including seven regular high school classes. In recent years, these classes have been divided into three first-year classes (1001, 1002, and 1003), two second-year classes (2001 and 2002), and two third-year classes (3001 and 3002). In addition, the school offers four Youth and Adult Education classes (EJA 1, EJA 2, EJA 3, and EJA 4), totaling 336 students. The staff consists of 25 members, including the General Director, Assistant Director, Pedagogical Coordinator, teachers, and support personnel.

As a teacher at the institution, I coordinated the creation of a Socio-environmental Protection Network involving eight regular high school students. The initiative aimed, on the one hand, to collect data on the supply of potable water in the streets surrounding the school and, on the other hand, to introduce participating students to the principles of critical environmental education, mobilizing them toward social engagement through the Network's activities.

In evening schools such as CEOM, time is generally more limited (45 minutes), and this represented one of the main challenges in initiating the Socio-environmental Protection Network. Given the restricted schedule, the administration—already occupied with bureaucratic responsibilities and the organization of the school's daily operations—became less accessible to proposals for new initiatives, since priority had to be given to routine and standardized activities established by SEEDUC.

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The initial objective of the Network established at CEOM was to engage students through the dissemination of concepts related to Critical Environmental Education, encouraging them to understand aspects of local reality and, from there, act in the field by identifying areas surrounding the school that suffered most either from inadequate water supply or from poor water potability. The final step was to mobilize students to identify the causes of these problems, understand their underlying factors, and contribute to the search for solutions.

The lack of water in some streets surrounding the school is recurrent, especially on steep streets. During a meeting with parents and guardians of students at CEOM, it was reported that residents who cannot afford to buy water from tanker trucks ask friends for help to carry out common activities such as washing dishes and showering. On flatter streets, such as Avenida dos Diamantes which runs through the school, the biggest problem is the potability of the water, which frequently comes out muddy. This problem directly affects a large part of the local community and motivated the creation of the Socio-environmental Network at CEOM.

Water shortages in some streets surrounding the school are recurrent, especially on steep streets. During a meeting with parents and guardians of CEOM students, it was reported that residents who cannot afford to purchase water from tanker trucks often rely on friends for assistance in carrying out basic activities such as washing dishes and bathing. On flatter streets, such as Avenida dos Diamantes, where the school is located, the primary problem concerns water potability, as the water frequently appears muddy. This issue directly affects a large portion of the local community and served as a major motivation for the creation of the Socio-environmental Network at CEOM.

In 2024, the lack of water supply led workers at the Rocha Miranda Home Distribution Center (CDD) to initiate a strike. According to the Union of Workers of the Brazilian Post and Telegraph Company and Similar Companies of Rio de Janeiro (SINTECT-RJ), representatives of the Internal Commission for Accident Prevention (CIPA) confirmed that water shortages are a recurring problem at the Rocha Miranda unit (SINTECT, 2024).

Despite the severity of the water supply problem in the region, involving students in the proposal to create the Network was not a simple task. Most students were unwilling to assume the responsibility, even after awareness-raising lectures conducted in high school classes. Nevertheless, some students accepted the challenge, and the Network's activities officially began in 2023.

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The exchange of experiences during workshops served as a pedagogical strategy aimed at further motivating students to engage with the Network. In this regard, it is important to note that:

> (...) pedagogical workshops within the teaching-learning process foster social development, in addition to enabling the exchange of experiences between mentors and participants, thereby expanding the socio-cognitive capacity, interactionism, and freedom to learn among all those involved. In this way, they allow participants to broaden the knowledge acquired in the classroom and relate it to everyday life." (Monteiro et al., 2019, p. 1).

Student participation in the Socio-environmental Protection Network project was initially very limited. The vast majority were not attracted to the proposal (80%). The three main reasons identified were the absence of immediate financial compensation, disinterest in environmental issues, and a lack of interest in research activities within the field of education. A considerable number of students attended school solely to obtain a diploma, without demonstrating any deeper commitment to their studies.

Regarding this demotivation among high school students, the study conducted by Mendes (2013) highlights that, from the students' perspective, disinterest in school activities was reported by six out of ten participants.

The study also indicates that this issue was perceived even more strongly by teachers, as approximately three-quarters of them considered student disinterest to be the main problem in high school education. However, the study further reports that not only schools, but also other institutions—such as families and communities—influence both student retention and dropout rates. School dropout and disinterest in high school are associated with the lack of immediate income capable of addressing urgent life demands, such as unplanned pregnancy or family unemployment.

> Because it represents the final stage of basic education and precedes entry into higher education, high school can be characterized as a transitional phase: from school to university, from school to employment, or even from school to family life. Students at this educational level face numerous adversities that frequently affect their motivation (Mendes, 2013, p. 264).

To attract students, the most prominent aspect of the project presented during the workshops was the mapping of areas lacking access to water around the school, with the aim of facilitating dialogue with public authorities. This stage of the research addressed an issue that directly affected part of the student population. Establishing the existence of a concrete

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problem to be identified through the Network's activities represented an important first step in attracting students to the project, despite the initial difficulty in gaining their acceptance.

Initially, the group that joined the project consisted of seven students: five from the third year of regular high school and two from the first year. Consent forms were signed by the guardians of students under 18 years of age, as well as by the school administration, authorizing the Network to carry out activities with students outside the institution's physical premises.

The training workshops were conducted over a two-month period, on Mondays, in the CEOM auditorium. They were organized into eight thematic sessions: Critical Environmental Education; Environmental Racism; the Fundamental Right to Drinking Water; Water Management in Brazil; Water Management in Rio de Janeiro; Urban Social Movements; the Socio-environmental Protection Network; and Questionnaire Administration.

The workshops involved engaging students with these topics through lectures supported by PowerPoint presentations, documentary screenings, and talks complemented by audiovisual materials, as well as discussion groups designed to connect the themes with the students' own experiences.

Student mobilization was based on the understanding that the workshop environment should serve as a space for the exchange of knowledge. For this reason, we avoided using the term "raising awareness," since we recognized that the students already possessed a certain degree of awareness regarding the environmental problems affecting the regions in which they lived, including issues related to the supply of drinking water.

During the workshops (Box 1), many of the debates encouraged students to critically reflect on their own actions, whether positive or negative, and to recognize their importance, given that all actions interfere with our way of life. The objective was to mobilize students by encouraging them to adopt a critical and reflective perspective toward both their own actions and the main agents responsible for environmental degradation within society's power relations.

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Box 1 – Training workshops for students of the Socioenvironmental Network of Olegário Mariano School, located in Rocha Miranda, RJ

Theme	Date	Expository activities	Group dynamic	Participants
Critical Environmental Education	03/06/2023; 17:30h - 19h.	Presentation of concept slides; Screening of the documentary Ile of Flowers (*Ilha das Flores*, 1989).	Round table	8
Fundamental right to drinking water	03/20/2023; 17:30h - 19h.	Presentation of the concept slides; Screening of the documentary Every Child is a Child (*Toda Criança É Criança*, 2015).	Visit to Rio das Pedras; Round table	7
Water management in Brazil	03/27/2023; 17:30h - 19h.	Presentation of slides about part of the history; Video presentation The Water Law of Brazil (2014) by the National Water Agency (ANA)	Round table	7
Water management in Rio de Janeiro	04/10/2023; 17:30h - 19h.	Presentation of slides about the history of CEDAE; Screening of the documentary Cedae - Water Paths: Novo Guandu (*Cedae - Caminhos da água: Novo Guandu*, 2023)	Round table	8
Urban Social Movements	04/17/2023; 17:30h - 19h.	Presentation of concept slides; Screening of the documentary Providence Hill (*Morro da Providência* #Entresembater, 2012)	Round table	8
Socio-environmental protection networks	04/24/2023; 17:30h - 19h.	Presentation of the concept slides; Screening of the documentary Sustainability, everyone's challenge (*Sustentabilidade, desafio de todos*, 2023)	Round table	8
Administration of questionnaires	05/08/2023; 17:30h - 19h.	Presentation of slides about the questions used in the study.	Training for questionnaire administration	8

Source: the authors (2024).

After the workshops concluded, activities outside the school environment began. Interviews with local residents regarding water quality and supply were conducted in streets surrounding the school, encompassing not only the Rocha Miranda neighborhood but also the

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neighboring district of Honório Gurgel. The interviews were carried out by six students, organized in pairs, under the supervision of the teacher responsible for the study.

The streets selected for the initial fieldwork were Rua dos Diamantes and Rua dos Rubis (geographic coordinates -22.84273, -43.35195), which are flat streets, and Rua General Gerônimo Furtado, Rua General Corrêa Lago, and Rua Pedro Labatut (geographic coordinates -22.84532, -43.35560), which are steep streets. Residential buildings in these areas consist predominantly of houses. Some are better structured, whereas others, particularly those located in alleys, have less infrastructure and experience more severe problems related to both water potability and water supply.

The initial interview question was: "Does your house receive potable water from the tap every day?"

Based on the interviewee's response, either yes or no, participants were directed respectively to questionnaire 1 ("yes") or questionnaire 2 ("no"). Both questionnaires included questions concerning identification data, length of residence, payment or non-payment for tap water, whom residents contact during water shortages, and information regarding the quality of the water received. A total of 72 responses were collected for questionnaire 1 and 28 responses for questionnaire 2, all administered between May and June 2023.

To expand data collection, two additional strategies were adopted. The first consisted of a meeting with students' parents and guardians, held on August 16, 2023, during which students participating in the project administered questionnaires to residents in the designated areas. The second strategy involved administering questionnaires, by the students involved in the project, to students enrolled in the Youth and Adult Education (EJA) program at the school between October and November 2023 and between February and March 2024. This process enabled the expansion of data collection to additional streets in the Rocha Miranda and Honório Gurgel neighborhoods, including Henrique de Góes, dos Opallas, Vieira do Couto, Doutor Areolino de Abreu, Cônego Boucher Pinto, Teófilo Mesquita, Mambucaba, Irapiranga, Ibirapuitã, Moçambique, das Safiras, Arabori, Luiz Mario, Agenor Porto, Alfredo Elis, Veríssimo Machado, and Avenida dos Italianos.

Plot 1 presents the responses to questionnaire 1 regarding the quality of the household water supply. The results indicate that 47% of respondents stated that they always receive good-quality water. However, 53% of those interviewed expressed concerns regarding the potability of the water, which represents an alarming situation, considering that this group had initially reported receiving potable water on a regular basis.

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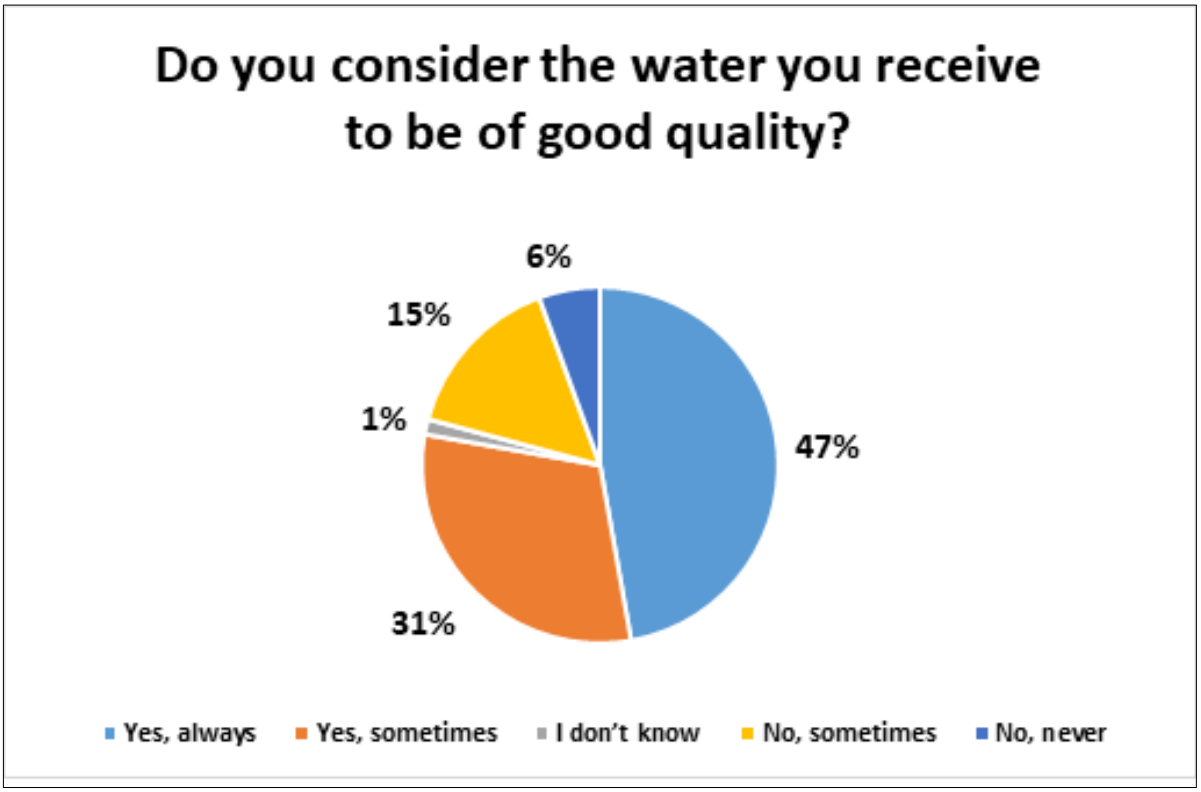
Plot 1 – Q1: Considerations regarding the water quality of the supply network, by residents of the Rocha Miranda and Honório Gurgel neighborhoods in the Municipality of Rio de Janeiro.



Source: the authors (2024).

Regarding the 28 respondents who answered questionnaire 2, that is, those who reported not receiving potable water from their taps on a daily basis, the largest proportion (14%) resided on Rua dos Diamantes. Although this street contains many well-structured houses, one section corresponds to the Rocha Miranda barrier community, where less structured residences are concentrated, very close to a polluted section of the Rio das Pedras.

Among the respondents to questionnaire 2 (Chart 2), who initially stated that they did not receive quality water daily, 18% reported that they frequently have access to good-quality water from their taps. The term "muddy water" was widely used by 71% of respondents in this group to describe the main problem related to water quality in the studied region.

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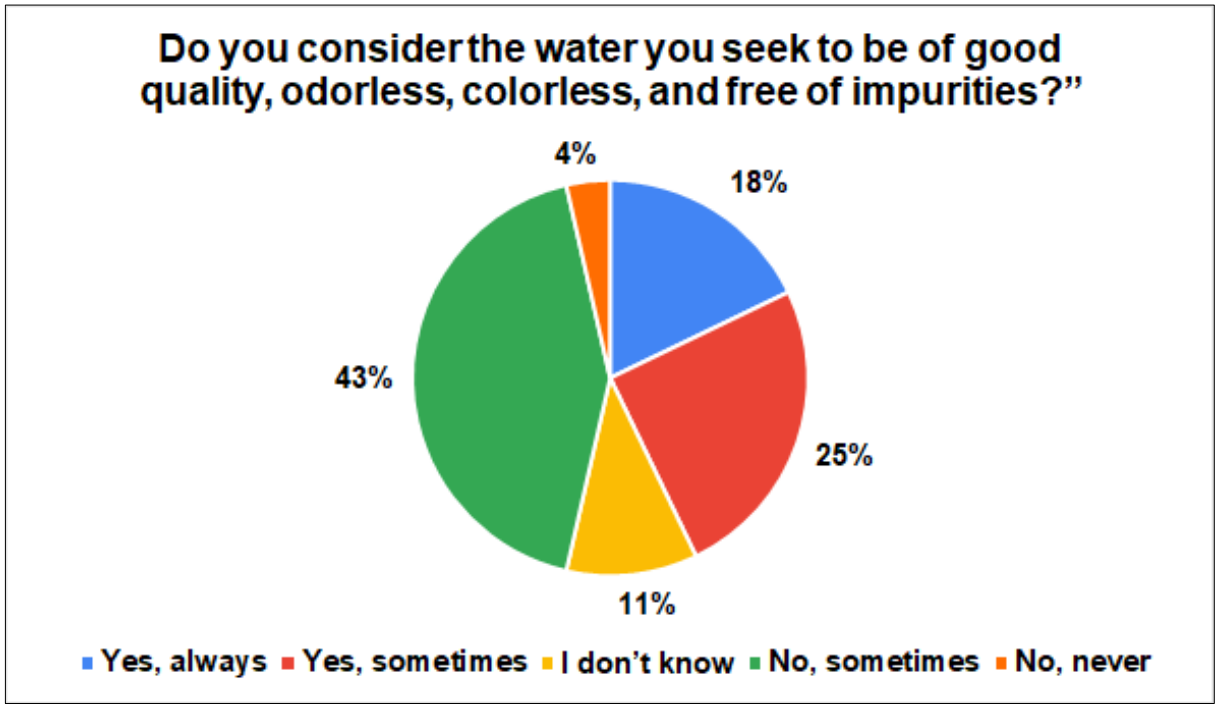
Plot 2 – Q2: Considerations on the water quality of alternative supply sources, by residents of the Rocha Miranda and Honório Gurgel neighborhoods, in the Municipality of Rio de Janeiro.



Source: the authors (2024).

The results obtained in this research regarding access to drinking water in neighborhoods located in the suburbs of Rio de Janeiro indicate that, beyond the city's water supply system itself, spatial dynamics must also be taken into consideration. According to Quintslr (2018), throughout the 20th century, groups with greater purchasing power gradually occupied new neighborhoods in the South Zone and in the "Greater Tijuca" region, supported by the expansion of urban infrastructure networks, including water supply systems. Meanwhile, low-income workers initially settled in the suburbs and later in the Baixada Fluminense, a historical pattern that continues to be reflected in current data.

The National Water Agency published Reference Standard no. 08/2024 (BRAZIL, 2024), which came into effect on May 20, 2024, and established guidelines for the universalization of these services and for monitoring their implementation. This standard establishes progressive universalization targets to be evaluated within municipal or district contexts in the exercise of responsibility for water supply services. However, according to reports collected by the CEOM Network, the practical implementation of these guidelines can still be considered unsatisfactory.

The highlight regarding the students' experiences was undoubtedly their performance in the interviews. More than just the technique of how to approach individuals to conduct a questionnaire, "(...) the interview workshop aims to deal with the production and treatment of oral sources in the classroom, with the intention of sensitizing the student's perspective

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towards the preservation of the memory of local groups, absent in the great historical narratives" (Silva, et al., 2014, p. 2).

Most students emphasized that they had not previously considered the importance of everyday information in research activities, since they assumed that meaningful scientific research could only be conducted in universities or specialized research centers. Valuing the testimonies of residents from favelas or other communities as a legitimate research resource became an important focus of the workshop dedicated to conducting interviews.

Interaction with students participating in the Network, outside the context of traditional classroom activities, transformed their relationship with the school. They were able to experience new spaces for exchange and developed closer contact with members of the administration, teaching staff, and maintenance team. These interactions emerged through the need to resolve practical issues related to the organization and functioning of the workshops.

As a result, the students' relationship with the school acquired a broader meaning than merely attending subjects during the reduced evening schedule. The school environment began to be viewed as a space for collective action in support of a cause directly affecting the community to which they belonged. The content explored during the workshops also helped prepare them for the more complex experiences associated with the Network's activities outside the school premises.

An unusual situation also occurred involving the CEOM Network students themselves. In the middle of one day of interviews, a pair of students interrupted the activity after noticing a kite falling from the sky, likely after having been "cut" by another kite. The students retrieved the kite and then returned to continue the interviews without showing any embarrassment about temporarily interrupting the formality of the research process. Experiences such as this can contribute an additional dimension to the teacher's understanding of the students' worldview.

Another striking aspect of the interviews conducted around CEOM was encountering students who worked during the day and attended classes at night. One student was employed as a bricklayer, another sold snacks and sweets alongside his parents, and another worked at a stationery store. All of them recognized me and addressed me as "teacher." This experience reinforced the understanding that many students attending evening classes are primarily focused on activities that provide immediate income, which helps explain their resistance to participating in the Network.

Rebouças et al. (2021) compared three schools that implemented projects based on generating themes associated with community environmental issues and that involved educators from different disciplines in the activities developed. The authors highlighted "School B" for presenting a pedagogical process with greater integration between the Political Pedagogical Project (PPP) and the curriculum, as well as for the creative use of available resources.

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One consequence of this approach was a change in participants' attitudes, as illustrated by the following student report: "Every day there's a man who cleans his dog's house and throws the trash into the river. I couldn't take it anymore and said: hey, sir, don't throw it in the river because it pollutes the water. He then said: whatever, when it rains the water will take it somewhere else. To which replied: it will pollute there too (Focus group School B)" (Rebouças et al., 2021, p. 70).

While, on the one hand, the study by Rebouças et al. (2021) identified limitations that create obstacles to the implementation of Critical Environmental Education, on the other hand, it emphasized that the initial and continuing training of educators, the availability of adequate teaching materials, and improvements in working conditions and school infrastructure can serve as positive examples of public policy initiatives.

In the case of CEOM, it is also important to note that the establishment of the Network contributed by creating an alternative educational space capable of minimizing the precarious and often limited conditions typically experienced by evening-shift students in peripheral neighborhoods of the state of Rio de Janeiro.

Network seeking partnerships

To continue the educational development of students participating in the CEOM Network, the Graduate Program in Public Policies and Human Formation (PPFH) at the State University of Rio de Janeiro (UERJ) provided round-trip transportation for participation in the 2023 student conference organized by the PPFH. This opportunity provided participating students with new experiences, as many were visiting a university for the first time and were able to form their own perceptions of the university environment. In addition to attending lectures related to public policy, they also participated in the presentation of the research describing the process of establishing the CEOM Network, of which they themselves were members, thereby strengthening their sense of belonging to the project.

Another important experience for the Network during this period was a visit to the Iran Municipal School, located in the Irajá neighborhood of Rio de Janeiro, where we delivered a lecture about the activities developed through our research. The visit took place in 2024, two weeks after World Water Day (March 22). During the event, the team involved in the project discussed the right to drinking water with elementary school students from the 3rd, 4th, and 5th grades. We were surprised by the level of knowledge some of these children demonstrated regarding the subject, and we identified that several of them also reported experiencing problems related to water supply and water potability in the neighborhoods of Colégio and Irajá.

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The first communication channel had already been created in 2023 through the Instagram profile @Rede_de_proteção_socioambiental-OL, which was used to disseminate the Network's activities, including interviews, workshops at CEOM, presentations at universities and schools, and efforts to establish dialogue with political representatives.

Final Considerations

The establishment of a Socio-environmental Protection Network within basic education institutions represents a form of social movement aimed at addressing the consequences of the current environmental crisis, in which population growth in large urban centers has generated disastrous environmental and social impacts.

Critical Environmental Education (CEE) focuses on the socio-environmental dimensions of human relations while critically examining relations of domination and capitalist exploitation. We advocate for CEE as a means of encouraging political participation and collective engagement in addressing local demands, in contrast to immediate individual interests.

Despite the considerable difficulty in engaging evening-shift students in the Network, those who agreed to participate became strongly involved, particularly in activities conducted outside the school environment. The students demonstrated significant potential to contribute to the Network, especially through their work conducting interviews regarding water supply and water quality, as well as through their participation in decision-making processes, including the creation of social media platforms to publicize the project's activities. Student testimonies indicate that participation in this type of social movement contributes to broadening their reflections on the reality surrounding them.

Among the 100 questionnaires completed by residents of the Rocha Miranda and Honório Gurgel neighborhoods, more than 50% reported either water shortages at their residences or problems related to the potability of the water received. It is also noteworthy that 82% of respondents who stated that they did not receive potable water daily also reported never receiving supplementary water supply services during periods of shortage.

The driving force motivating the participating students is the hope that the Network will leave a meaningful legacy in the region. The creation of communication channels on social media to disseminate the activities of the CEOM Network, while simultaneously receiving complaints and reports from residents, represents an important step in this direction. The Network remains a legacy of possibilities for future mobilizations in territories seeking to address the social demands of specific communities.

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