FOR A TRANSFORMATIVE EDUCATION: EXPERIENCES AND EDUCATIONAL PRACTICES DEVELOPED IN A SCHOOL IN THE MUNICIPALITY OF TIMON-MA

Maria Divina Ferreira Lima
Universidade Federal do Piauí-UFPI

Raul Ferreira de Miranda Mendes
Universidade Federal do Piauí-UFPI

Dilmar Rodrigues da Silva Júnior
Universidade Federal do Piauí
Abstract: Working with school projects gives students the opportunity to experience innovative and social ways in different learning environments and possibilities. It is a way of promoting interdisciplinarity, in addition to contextualization. Aspects that have become significantly important in the routine of schools. Based on the central idea of this experience report developed in a school in the city of Timon-Maranhão, we ask: what are the results of an education developed through pedagogical projects inside and outside the classroom? It has the following objective: to analyze the contributions of pedagogical projects in different areas of knowledge and their implications for student learning. The results show that first of all, the school needs to organize its pedagogical work, and be guided by its Pedagogical Political Project. There is a need to develop interdisciplinary projects contextualized in different approaches to knowledge. It can be concluded by showing that educational projects are stimulating agents for the construction of knowledge and how actions like this can transform the school environment and its community.

Keywords: Transformative Education; Teaching-learning; Educational Practices.

INTRODUCTION

A transformative educational action carried out “in and by” the school is one that goes beyond its walls and has an effect on the surrounding community. The school is the institution that favors formal education, whose work is in the dimension of pedagogical practice as an intentional action. In this sense, the social function of the school is to form citizens’ commitment to strengthening bonds and values inspired by the principles of solidarity, aiming at the full transformation of the individual. On the other hand, the formation of the educational character lies in the articulation and mobilization of historically accumulated knowledge whose bias lies in the possibility of developing actions that establish the scope of educational results.

Education is an extremely important element for the development of society. Therefore, it also has its bases based on the social dimension, as is the case with non-school spaces: family, friends, community, social movements and organizations, in addition to religious institutions. All these experiences form the constitution of education as a complex and multifaceted act because in order to happen, it establishes a living interdependent relationship between affective, cultural, ethical, moral, political and/or psychological aspects.

The educational process can also be characterized by formality and informality. Informally, the educational process occurs in people’s daily lives and in human relationships; This every day and informal action refers to the exchange of experience and the maintenance of values of society or a group within society. Informal education can be identified as those processes and actions that occur in everyday life and in the interrelationships of people and groups; it is pregnant with ideology or common-sense values; of the values preserved by the society in which it operates. Everyday relationships occur informally and educational actions are manifested in them, often unintentional, but always loaded with values.

From this perspective Luckesi (2001, p.30) states: “education is a typical human “want to do”, that is, a type of activity that is fundamentally characterized by a concern, by a purpose to be achieved”. From the author’s point of view, the process of education, in this conception, as in many similar ones, is confused with the idea of adjustment. The educated individual would be adjusted to the life of their community, without any critical judgment about their uses and customs, about
their way of living, passively accepting the culture of their social environment. These can be considered relativistic conceptions of education. They do not intend any social transformation, but the simple preservation of culture.

Reflecting on the meaning and value of education in and for society, Luckesi (2001) separates educators into three groups: “the first who understands education as redemption, the second as reproduction and the third as transformation of society [...]”. In this context, it is extremely important to develop projects at school that awaken in the student a dimension of the importance of preserving the environment in which they live, considering the perspective of the historical-cultural subject, valuing the dimensions of their learning and articulating the need for mutual social learning.

In view of this, the present work comes from our experiences through pedagogical projects developed in the teaching-learning process, articulating with social learning within the school environment, in the municipality of Timon- Maranhão. Starting from the following problem question: what are the results of an education developed through Project Pedagogy in Elementary Education?

In this sense, this work is divided into the following structural format, in addition to this introduction and final considerations: a section on learning from a historical-cultural perspective; another section deals with planning the action research and finally the evaluation of the action. We conclude by showing that teaching practice requires good mediation between the stimulus and the subject, that is, between the student and the object for learning to happen.

DEVELOPMENT OF EDUCATIONAL PROJECTS AND SOCIAL LEARNING AT SCHOOL

The social practices that form citizenship constitute a privileged space for the development of personal responsibility and voluntary cooperation. Inserted in the environmental governance process, the concept of “social learning” (AS) opens a stimulating area for developing learning processes in which those involved can learn about the critical context of an individual's sociocultural reality.

This way, you will be able to develop attitudes that you will take beyond the school walls. Regarding the role of education in the formation of the individual, Vygotsky (1930) states that:

Education must play the central role in the transformation of man, on this path of conscious social formation of new generations, education must be the basis for changing the historical human type. The new generations and their new forms of education represent the main route that history will follow to create the new type of man. (VYGOTSKY, 1930, p.08).

Based on Marxist theory, Vygotsky (1930) proposes an analogy between two types of mediating elements of man/world relations, which are instruments, which mediate the relationship between man and nature and are externally oriented (have an objective character), the other element is the signs, which function as instruments of psychological activity, expanding the possibilities of man's control over himself and are internally oriented (they have a subjective character).

The school must be seen, as Masschelein and Simons (2017) state, “we must see the school as a kind of pure means or center. The school is a means without an end and a vehicle without a determined destination [...]

Many
claims that the family is the great villain in school failure, as it does not accompany the student in the correct way, does not give importance to school, that the student will only reproduce their social condition... But in addition, one must analyze the fact is that the school has great power to change all of this.

The magic occurs inside the room, when the teacher manages to build knowledge with his students, without any prior judgment, like what is often heard “there are students who are hopeless”, “this student is incapable of learning”. (MASSCHELEIN AND SIMONS, 2017, p.23). When the teacher enters the room with this thought, all the power of the school and all the possibility of this student transforming their reality are nullified. The teacher in your classroom must be an animator of learning, a stimulator of dreams, a connoisseur of his students. This way, his practice may be more appropriate to that reality.

The importance of the teacher is well known, as he is the center of everything, without the effective contribution of this actor, nothing happens, he can make a beautiful school, with different computers, different technologies, he can create different laws and BNCC to standardize what the student must learn in a given time and space. It all depends on the teacher, as he can transform his student’s life, even in a mud school, or under a mango tree, without a row of chairs or in a circular format. The teacher can transform the hunger of a student who left home without eating because he didn’t have any, into a dream.

From this perspective, we can look to Bourdieu’s writings about the different “attributes” that each social class can have, which are economic capital (purchasing power), social capital (social relations), cultural capital (appropriate knowledge or not) and symbolic capital (such as one is perceived by the other). Of course, a student who has more of these attributes than another due to their social position, will have a greater chance of being successful at school, as this success depends on the failure of the other.

But this does not mean that those who have the most attributes will always be successful. This demonstrates that not everyone is equally successful in the race of life. But the school is the place that most tries to equalize everyone in this race, however there is no way to completely shield the school from social inequalities brought about from outside its walls. Therefore, we must see the school as a means, an institution without a certain and determined purpose, as can be ratified in Masschelein and Simons (2017) based on the assumption that:

School, as a matter of suspension, implies not only the temporary interruption of time (past and future), but also the removal of expectations, needs, roles and duties linked to a particular space outside of school. In this sense, the school space is open and not fixed. The school space does not refer to a place of passage or transition (from the past to the present), nor to a space of initiation or socialization (from family to society). On the contrary, we must see the school as a kind of pure means or center. School is a means without an end and a vehicle without a determined destination. (MASSCHELEIN AND SIMONS, 2017, p. 18):

In this context, during the development of the Science curricular component, it is important to develop projects that aim to awaken care for nature and thus attempt to provide training so that this student, outside of school, can take actions that always aim to strike a balance between the economy and nature, taking into consideration, conscious consumption.

Carvalho (2012) defines an “ecological subject”, which would be a subject with attitudes, ethical values and individual and collective actions that promote ecologically oriented behaviors. These characteristics are
becoming increasingly necessary for today’s citizen. Because negative anthropogenic actions on nature are increasing. The National Environmental Council defines environmental impact in its Resolution Number: 01 of 1986:

any change in the physical, chemical and biological properties of the environment, caused by any form of matter or energy resulting from human activities that, directly or indirectly, affect: I - the health, safety and well-being of the population; II - social and economic activities; III - the biota; IV - the aesthetic and sanitary conditions of the environment; V - the quality of environmental resources.

In compliance with resolution number: 01/1986, within experiences with the environment and sustainable practices, especially in the subjects of science and geography, in the teaching and learning process it was fundamental for the construction of people who respect water and the environment and fight for its preservation. Thus, when the contents are worked on in project form, they provide learning situations in which students actively participate in the construction of knowledge, making the educational process a more dynamic practice, contextualizing and experimenting, promoting meaningful learning situations.

Among the most common negative human actions that harm the environment today is planned obsolescence, that is, things are being produced to be used for a short time. Bauman (2008) states that we have moved from the “Society of producers” to the “Society of consumers” and that in this case:

It devalues durability, equating “old” with “out of date”, unfit for continued use and destined for the trash can. It is because of the high rate of waste, and the decreasing temporal distance between the budding and withering of desire, that the fetishism of subjectivity remains alive and credible, despite the endless series of disappointments it causes. A consumer society is unthinkable without a flourishing waste removal industry. Consumers are not expected to pledge loyalty to objects they obtain with the intention of consuming. (BAUMAN, 2008, p.44).

We fully agree with what Colagrande et al. (2021, p. 02):

If we think about the scope of the school, even though the educational space sometimes has difficulty in the effective implementation of an Environmental Education that favors the broad development of citizenship, it needs to offer, through its projects, minimum conditions for reflection on the importance the formation of environmental awareness, understood here as awareness about the environment and the relationships established between it and society, as well as all situations involving these relationships and one’s own role in the face of these issues. In this sense, it is important to turn our attention to school spaces. (COLAGRANDE et al, 2021, p. 02).

Educational institutions are already aware that they need to work on environmental issues and many initiatives have been developed around this issue, where the theme of the environment has already been incorporated into education systems as a transversal theme in school curricula, permeating all educational practice. Environmental education in schools contributes to the formation of conscious citizens, able to decide and act in the socio-environmental reality in a way committed to life, to the well-being of each person and society. For this, it is important that, more than information and concepts, the school is willing to work with attitudes, with the formation of values and with more practical actions than theoretical ones so that the student can learn to love, respect and practice actions aimed at environmental Conservation.
ACTION PLANNING DEVELOPED

This action was developed at Escola Municipal Luiz Miguel Budaruiche, located in the city of Timon-MA, the neighborhood is heavily dominated by criminal factions. We have a high number of students who are socially and nutritionally vulnerable. Most of them have school lunch as their main meal. Despite this, the school managed to stay above the target in the 2021 Basic Education Development Index (IDEB), which is the assessment of Basic Education in Brazil, carried out by the Ministry of Education. There are 21.4% of students with age-grade distortion. The school has 1,050 students in three operating shifts and an annex (which is a prison), of which 46 are students with special educational needs. The vast majority of parents receive Bolsa Família and do not have completed primary education. The 13 classrooms have two air conditioning units in each one, which generates high energy consumption. Awareness of the energy expenditure of such a device was absent in the school environment. Therefore, the students’ financial condition does not allow them to own such a device.

Furthermore, the school only had two plants. That went unnoticed and its importance for the environment was overlooked. The students broke their swag and removed leaves without any idea or respect that there was a living being that contributed greatly to the school’s microclimate. The walls of the school were completely scratched, the doors, windows, desks and tables were broken or scratched. The drinking fountain always had water lined up around it, as it was common to leave the tap running unused. The bathrooms were vandalized and flooded with water mixed with student urine. Given this, we thought of a project that could promote students’ awareness about environmental preservation and that would inhibit these negative actions, so this action is called “AGENTS OF SUSTAINABILITY”.

This project basically consisted of electing three students from each class, whose role was to preserve the school environment and guide other students so that they did not break chairs and doors, scratch walls and desks, or tear leaves from plants, among other actions. These agents would be remunerated with points in their assessments and students who carried out actions that did not comply with sustainable development would receive guidance and if they persisted, they would receive fines in points. These points would be removed from your assessments.

Furthermore, students who received the most fines were invited to carry out some activities at school such as planting plant seedlings, repairing chairs, cleaning scratched desks, with parental permission. As the project aimed to raise awareness of positive and negative anthropogenic practices in the environment.

Before the election of sustainability agents (Figure 01), Science teachers worked on concepts and carried out a scientific investigation into the production of objects used at school with some guiding questions, for example: How many trees are needed to produce a ream of paper? How many trees are needed to produce a school table? Where does the iron that makes part of the school chair come from? This knowledge could reduce negative actions in the school environment. Parallel to this, the fines proposed (Figure 2) in the project for anyone who committed any action contrary to sustainable development would help students to take a critical stance towards negative practices.
Figura 01. Sustainability agents with their vest and fine pad in hand. Authors’ collection.

Figura 02. Fine used by the Agent to fine offending students (photo of the author himself).

All fines applied are debited from the student’s grade in all subjects. The assessment header itself shows the place to place the fine (Figure 03).

Figura 03. Reviews header. (authors’ collection).

In addition to increasing interest in science and nature. The students chosen to participate effectively (agents) in the project would be true multipliers of positive sustainability practices. But to accomplish all this, the help of all teachers, from the 6th to the 9th year, would be necessary. This help would be used to place points earned by tax students and remove points from fined students.

In addition to the teachers helping with the work on some content. Therefore, the project had the following objectives:

6º YEAR • Establish the proportions of water inside and outside living beings; • Estimate the amount of water needed for vital functions; • Name the components of water; • Awaken interest in nature; • Discover the importance of observing the environment as a way of revealing knowledge; • Demonstrate interest in Science as a way of better understanding the environment around us; • Describe the water cycle; • Know the percentages of water on the planet and the fractions available for consumption by living beings, including humans; • Relate the importance of water to the life of living beings, especially human beings; • Avoid wasting water; • Take a critical stance in relation to any and all forms of water waste; • Defend and actively practice any and all measures aimed at saving water; • Promote water saving practices and measures.

7º YEAR • demonstrate an interest in Science as a way of better understanding the environment around us; • awaken interest in nature; • respect and value all forms of life; • defend and actively practice any and all measures in favor of environmental preservation.

8º YEAR • Define environmental degradation; • Point out and establish relationships between factors directly and indirectly related to the process of environmental degradation; • Understand the importance of preserving the environment for the future of this and future generations; • Actively participate in improving environmental conditions and become a multiplier agent of such attitudes, in order to promote sustainable development; • Develop
a critical and conscious stance in relation to environmental issues; • Demonstrate interest in Science as a way of better understanding the environment around us; • Defend and actively practice any and all measures in favor of environmental preservation; • Propagate environmental preservation practices and measures; • Reject and prevent environmental destruction practices; • Recognize that environmental preservation is fundamental to quality of life.

9º YEAR • Check the energy consumption of household electronic devices; • Compare your home’s energy consumption throughout the year; • Avoid wasting electrical energy; • Take a critical stance regarding forms of waste of electrical energy; • Identify the environmental impacts resulting from deforestation, the hole in the ozone layer, the greenhouse effect, acid rain and radioactive contamination and understand how they occur; • Develop a critical and conscious stance in relation to environmental issues; • Demonstrate interest in Science as a way of better understanding the environment around us; • Propagate environmental preservation practices and measures; • Reject and prevent environmental destruction practices; • Recognize that environmental preservation is fundamental to quality of life; • Recognize the finiteness of natural resources; • Participate in activities aimed at differentiated or selective collection and recycling; • Be aware of the need to reduce consumption and reuse materials.

What most inspired this project was the students’ prior knowledge. They showed a low level of knowledge, mainly regarding the conservation of the environment around them and awareness about environmental preservation, for example, when a school table made of wood breaks, more material has to be removed from nature to produce a new one. Therefore, caring for our public assets is seen as a positive anthropic action.

This diagnosis was detected through an oral questionnaire carried out in all classes. Few students were able to answer the questionnaire satisfactorily. I realized that the students were unable to calculate their home’s energy and water consumption. Therefore, they had no idea of the financial and environmental resources needed to sustain our energy and water needs. They were also unable to answer the origin of the raw material used in the manufacture of objects used at school. This diagnosis lasted one month.

Given this, we felt the need for a project that would make students aware of the importance of preserving the environment around them for a better quality of life. It was also necessary to awaken interest in nature and propagate practices and measures to save water and energy. To do this, I gathered the other teachers to discuss the project.

After that, we met with the Science teachers and asked them to conduct research and debates from the 6th to the 9th year of Elementary School on the following topics: treatment and importance of water; environmental pollution; types of natural resources; the origin of our energy; degradation of environments; the origin of materials to produce chair, table, door, paper; destination of our garbage; among other topics. Each was suitable for each age group and year-round.

**ACTION EVALUATION**

Interviews were carried out with some students in all rooms participating in the project. They reported that changing the school environment along with scientific concepts and research helped them realize how preserving the environment improves quality of life. Some confessed that it was necessary to receive some fines to be able to engage in preserving the school environment. In addition to the interviews, it also monitored
the number of fines applied per month. At first the number of fines was very high, then it decreased and the school environment was well maintained and pleasant.

Further confirmation of success came when the project was awarded as one of the best projects in the State of Maranhão. The school received a total amount of R$3,000.00 (three thousand reais). This money was used to build a garden with seedlings planted by students who received more than one fine during the year. It was also used to maintain the project, which has a low cost considering the social and educational return.

A year after the start of this action, there was a noticeable change in the school, with almost zero problems of vandalism, with reduced indiscipline and, above all, with students more aware that preserving the environment around us generates quality of life. Students who were previously undisciplined showed with their creativity how to transform materials that were previously trash into objects that are still used at school today.

This project is simple and easy to apply. The only resource that is used the most is paper, which is used to produce fines. It also takes a little time to organize all the fines applied and publish them for students and teachers (Figure 04).

This project reduced indiscipline in the classroom and increased grades. And especially raising students’ awareness of environmental preservation. We had parents who attended the school and reported that their child changed a lot after the project. He stated that he was more responsible and studious. In addition to worrying about water and energy consumption in your home.

**FINAL CONSIDERATIONS**

Given this, it is possible to see that actions like this must be common in Brazilian schools. Actions that transform the school so that the student can later transform their community and reality. It can be seen that an action like this does not require much financial resources, nor does it need the mayor to issue a decree, nor does it need the Ministry of Education to issue a law. All it took was for the teacher to believe it would be possible, the school is located in a vulnerable community, with vulnerable students and parents, but it happened, and it still happens. We want to draw attention to the fact that for transformative action to occur there is no need for great demands. It only needs the raw material, which is the student.

However, planning on the part of the teacher is necessary, we agree with Zabala (1998) when he states that: “the planning and evaluation of educational processes are an inseparable part of teaching, since what happens in classes, the pedagogical intervention itself [...]”. It is logical that an unintentional action takes no one anywhere. Intentionality is always necessary, all steps must be linked and with their related objectives. Furthermore, the student must be won over to carry out this action, carrying it out because it belongs to the school or because it is worth a point, it will not have the same result and effect compared to when the student “buys the idea”. Teacher and student must be connected in this action.

In this sense, Nóvoa (1999, p.77) draws our
attention to the importance of the teacher’s trajectory, including his life as a student and especially his initial training: “teaching is a social practice, not only because it takes place in interaction between teachers and students, but also because these actors reflect the culture and social contexts to which they belong […].” The teaching process cannot be reduced to just transmitting content. The teacher needs to be aware of his strength in this process. It is clear that school dropout rates are higher in primary school and in the final years and much higher in secondary school. In these two stages, the teacher distances himself from the student. Pedagogical practice ends up being influenced by this relationship. In Elementary Education in the early years, the relationship between teacher and student is close. This turns into greater learning and less dropout.

REFERENCES


COLAGRANDE, Elaine Angelina; Farias, Luciana Aparecida; Bitencourt, Ana Luisa Vietti;

LEITE, Luiz Omir de Cerqueira Educação Ambiental em Escolas Municipais de Diadema, SP: estudo de características e prática. Ciência & Educação (Bauru) [online], v. 27, 2021.

CONSELHO NACIONAL DO MEIO AMBIENTE-CONAMA. RESOLUÇÃO Nº 001, de 23 de janeiro de 1986.


