

# The importance of the environment in everyday school life: working with deaf students using active methodologies

Hellen Lima Leite\* (Corresponding author)

<sup>1,2</sup>Postgraduate Master in Engineering, Process Management, Systems and Environmental (EPMSE/ITEGAM). Manaus – Amazonas, Brazil.

E-mail: [hellenlimapaulo86@gmail.com](mailto:hellenlimapaulo86@gmail.com)

Jandecy Cabral Leite

<sup>2</sup>Institute of Technology and Education Galileo of Amazon (ITEGAM).

Manaus-Amazonas, Brazil.

Email: [jandecy.cabral@itegam.org.br](mailto:jandecy.cabral@itegam.org.br)

## Abstract

*It is relevant that the study presented presents an analysis of the main methodologies used in the education of students that emerged in Elementary School, having as a model the theme, The Environment in School Daily Life and its Active Methodologies. The study aims to evaluate the results by the capacity of the students acquired Environment in the Daily School Life of these deaf students, through active methodologies. The student is encouraged to take an active and responsible stance in their learning process, seeking self-regulation and meaningful learning. Learning methods and techniques that stimulate student-teacher and student-student interaction, teaching materials and resources and handouts, almost always, in collaborative learning, taking the student to be responsible for the construction of their knowledge. Based on this premise, we will present a qualitative research and significant results. Expand our information through field research by observation studies and studies, expanding experiences with students emerging from a state school in Manaus. Therefore, we will present some methodologies, among which are Recycle, Reuse and Reduce solid waste. It was found that the methodologies used are oriented according to child-centered learning theories. In this investment in the deaf and their registration, student, context, thus, the service to useful services for stimulation and development is essential. Based on the evaluation of the results by the applicability of the environment themes obtained in the school routine, and the uses of active methodologies, to propose a new method of study to train deaf students. We will seek the best way to work as methodologies in the training of the deaf subject. It was verified the use of the methodologies that motivate the use of the methodologies that motivate the use of their disks and the direction of solutions to make an impasse and promote their development, which is an adequate and necessary instrument for a new learning. It is concluded that the teaching and learning process with deaf students still lacks research opportunities aimed at the adoption of new techniques that favor learning at better levels of qualification for the child.*

**Keywords:** Environment. Diversified methodologies, Deafstudents.

## **I. Introduction**

The path taken to achieve legal rights in deaf education has been arduous and laborious. Concomitant the praxis that motivated us to choose this theme, originated from the experiences lived in the scope of the Formation in Degree in Pedagogy and in the supervised internships. Thus, this study is located in the field of Environment and Special Education and aims to understand the challenges of training deaf students in Primary Education in everyday school life. The need for improvement in our training was what led us to further research, making us reflect on the postures we adopt in the classroom, through the strategies, methodologies, among other teaching behaviors. The active methodologies are characterized by placing the student at the centre of the teaching and learning process, making him constructor of his own knowledge through activities and planning, allowing him to develop a broad look about the methodologies and the environment.

In this line of thought, Martins (2019), mentions that 'training should create situations of searching and questioning, seeking to unsettle trainees, awakening them to a critical attitude towards their role as future educators, which is intended to be called active agents.' According to Silva (2019), the experiences acquired in undergraduate studies with supervised internships, field activities and theoretical classes, contributed too much to the construction of being a teacher, however, the proposed activities gave us the opportunity to spread knowledge through remarkable experiences, including by bringing us closer to the educational reality that we will live in the coming years. And about the deaf education, it is worth mentioning that the methodologies stipulated by the Law of Directives and Bases of Education (LDB), encouraged a process of socialization, aiming to meet the challenge of inclusion of these students in the listener culture. For it is known that these moments offer subsidies for the planning of pedagogical interventions, able to contribute to the construction of new learning. Therefore, we investigate the following problem: Which methodologies can work, facing the challenges of environmental problems?

Based on these assumptions, the general objective was to evaluate the results obtained by the applicability of environmental issues in everyday school life, and the use of active methodologies to propose a new method of study for the training of deaf students. For this, we elected four specific objectives that guided our study, namely: a) understand how the learning process develops in children in order to enhance cognitive development and the production of knowledge in education; b) analyze the effectiveness of the application of knowledge through active methodologies, about the environment in the school environment; c) demonstrate how active methodologies can be a tool for environmental awareness and mitigation of damage caused by man, regarding the economic and social development; d) clarify what is the best way to work active methodologies in training with deaf students. The research is anchored in a qualitative approach and, for Mazucato (2018), the methodological scope of qualitative research is the path of thought to be followed. It occupies a central place in the theory and is basically the set of techniques to be adopted to build a reality.

To better understand these techniques below, the types of clippings and approaches of qualitative research are discussed, as well as the methods of collection, types of data and methods of analysis that can be used in its preparation. Brito; De Oliveira; Da Silva (2021), clarifies that the bibliographical research seeks

the resolution of a problem (hypothesis) through published theoretical references, analyzing and discussing the various scientific contributions. In this research, it was also used the field research, and according to Lüdke (2016) this type of research, studies a single group or community in terms of its social structure, i.e., highlighting the interaction of its components and looking much more the deepening of the proposals. Thus, the study was conducted in a state school of the public network of Manaus (AM) with the interest of expanding the possibilities of working a teaching methodology, which is easy to understand for the deaf student. In a conclusive logic will be, still, woven some diversified teaching methodologies, in order to explain, synthetically, the necessary and emerging transformations in the teaching of the deaf. The choice of place was motivated by the experience as interpreter of Libras - Brazilian Sign Language, with the permission of the school management, which gave us the space and provided the research. Moreover, education should be organized in order to provide opportunities for students to use knowledge about the environment to understand their reality and act on it, through the exercise of participation in different instances: in activities within the school itself and in community movements. In view of the above, it is found in the literature review, the theoretical contribution, which is based on some guiding terms, such as: "environment", "school daily life" and "active methodologies". Subsequently, the methodological procedures used to support the development of the reflections raised for this communication are presented. The results and discussions appear soon after, being these structured together. Finally, there are the final considerations of the information presented.

## **II. Bibliographic Review**

### **2.1 Environment and Environmental Problems**

Seeking to understand the conceptualization of the environment, given that it is often confused with the concepts of nature, ecology or even ecosystem, we found some definitions to guide the discussions proposed here. Therefore, and taking into consideration the complexity of its constituent elements, as well as the established relationships, the environment can be considered: Environment is not only the space in which we live "but the space of which we live", "environment is every relationship, is multiplicity of relationships. It is the relation between things, as in the chemical and physical-chemical reactions of the elements present on Earth and between these elements and plant and animal species; it is the relation of relation, as in the manifestations of the inanimate world with that of the animate world (... ) is especially the relation between men and the natural elements (air, water, soil, flora and fauna); between men and the relations that take place among things; between men and relations of relations, for it is this multiplicity of relations that permits, shelters and governs life, in all its forms. Beings and things, isolated, would not form environment, because they would not relate to each other" (ROCHA, 2017, p. 18, 19).

The environment is not a synonym of ecosystem. It includes the anthropic and technological element while the ecosystem, as defined, with its homeostatic characteristics of control and natural evolution does not support man, except in its primitive stages, because it is incompatible with the finalism and deliberation characteristic of this species. However, this does not imply that man does not inscribe himself or does not constitute an element of a larger and more complex system: the environment, with a balance coordinated by a network of information of a different order from that which presides over the ecosystem, because emanated

## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

from a conscious creative principle, in permanent integration with the system as a whole (PAIVA, 2020, p. 103). For Silveira (2018) with the emergence of agriculture, a process that developed unconsciously through the modifications made by man to the environment, it was possible to establish fixed dwellings (sedentary), which consequently increased population growth since, there was more food available in small spaces. This fact gave rise to the first cities. Some considerations can be made in this regard, namely agriculture was essential to fix the man in the territories, which enabled greater population growth; technological innovations (use of fire, the wheel and writing, for example); agriculture also provided the emergence of battles, real disputes between different societies for land and natural resources, a fact that triggered the emergence of defensive weapons in order to ensure the safety of their territories; agriculture was responsible for the first impacts caused to the environment, which, with time and amplitude, became overwhelming. Complementing the observations on the relationship between environmental problems and the emergence of agriculture, the aforementioned author highlights this issue by emphasizing that, from the advent of agriculture, we (humanity) saw the first examples of changes caused by human action, as well as its power of destruction, characterized as the first examples of society that damaged the environment in such a way as to cause its own collapse. Thus, it was observed that, after the advent of agriculture and the emergence of the first cities, there was a major change in the process of organization of ancient civilizations, giving rise to societies increasingly organized, hierarchical and stratified.

Man began to interfere in the environment in order to meet his needs, transforming the natural environment into a cultural environment, and thus, not seeing himself as part of nature<sup>4</sup> in which he lives and survives. In this way, environmental exploitation has intensified, and man, believing himself to be the master of nature, could therefore manipulate it as he wished. Such idea, of superiority, was put into practice by the fact that man considers himself a social being, according to Krzysczak (2016, p. 1-17): Which can be perceived in the speech of Lacerda (2018), when the author reports that the concern with the environmental problems arising from the processes of growth and development occurred slowly and in a very differentiated way among various agents, individuals, governments, international organizations, civil society entities. From this perspective, it can be said that awareness of environmental problems is very recent, with the world beginning to worry about the impacts generated by the misuse of natural resources, especially in the last decades of the twentieth century. The environment is a priority theme in the agendas of Heads of State, Non-Governmental Organizations (NGOs), traditional populations, rural and urban groups, unions, companies, community associations, public administrations.

Undoubtedly, the environmental crisis is one of the fundamental issues faced by humanity and requires the need for a change of mentality, in search of new values and ethics in which nature is not only seen as a source of profit and starts, above all, to be focused as a means of survival for the species that inhabit the planet, including man (ODY, 2015). Thus, it is extremely necessary a holistic understanding of what comes to be environment, as a way to integrate all the elements that influence its constant transformation process, aiming, from then on, new relationships with this environment in an attempt to reestablish, especially, its exploitation process overcoming the representation of nature as an object, a view that triggered all the environmental problems that are established today. According to Silva (2019), the environment no longer receives that

traditional descriptive/contemplative view by geography as if it were a sanctuary that exists parallel to society. The environment is then seen as a resource to be used and as such should be analysed and protected, according to its different conditions, in an attitude of respect, conservation and preservation. According to Santos (2016), the environment or environment is socially and historically constructed. Its construction takes place in the process of continuous interaction between society in motion and a particular physical space that is permanently modified. The environment is passive and active. According to Souza (2021), reports that the environment, by including the man and everything that surrounds him, constitutes a dynamic process and constantly changing, caused both by external factors, without the influence of man, flora or fauna, as caused by the actions of human beings in the transformational processes of raw materials that he manipulates, as well as cultural transformations caused by changes in values induced by man himself.

According to Faleiro and Ribeiro (2020), this environment in constant transformation can change for the better in terms of benefits to the beings that live there as it can worsen, causing the destruction of these same beings. Thus, the environment, as a construction of the mind and human action may serve as an enhancing or destroying factor of the very humanity that manipulates it. Thus, the insertion of the theme "The Importance of the Environment in Everyday School Life" promotes reflections on the need to preserve and protect it, which makes students and teachers become citizens committed to finding solutions and tools for a better quality of the environment. The challenge of environmental education is to create the basis for a holistic understanding of the local reality and of the planet as a whole, to enable citizenship to be exercised, thus enabling barriers to be overcome, making sustainable development possible and teaching children that it is possible to grow economically while thinking about the environment. The responsibility for the acquisition of knowledge develops in the student skills to learn how to learn. The use of these tools causes a gain and greater capillarity on the part of environmental education and, the same should be conceptualized as a process that consists in providing people with a critical and global understanding of the environment, to elucidate values and develop attitudes that enable them to adopt a conscious and participatory position on issues related to the conservation and proper use of natural resources as reported (Castro, 2016).

## **2.2 Active Methodologies**

For Santos (2016), learning in the knowledge society presupposes an autonomous, critical and opinion-forming learner. These methodologies use problematization as a goal to motivate the learner to develop reflections of ideas through the problem presented, relating his history and giving new meaning to his findings to apply it in practice. Faced with the problematization, the learner reflects on the information producing knowledge in order to solve the doubts and concerns regarding the problems, thus promoting their own development from the construction and reconstruction of knowledge.

Considering the active learning methodologies, it is worth highlighting Problem-Based Learning (PBA), which aims to establish a pedagogical method focused on the learner, whose goal is active learning from the collaboration and motivation, factors that intensify the learning space instigating greater interest in training. According to Farias, Spanhol and Souza (2016), problem-based learning includes activities designed to allow the learner to acquire theoretical concepts integrated with the need to develop skills related to social

## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

interaction, group work, leadership, conflict resolution, communication and collaboration. The development of PBA can be configured through the presentation of a report or any other artifact of the learning process outcome. Problem-based learning emphasizes the tacit knowledge of the learner that is evidenced in the analysis and resolution of the problem from their personal and professional experience and, therefore, stands out as an important stage for learning as well as for the classroom context (JUNIOR et al., 2021, p. 1).

According Bossa (2020), The work of educational guidance in schools, in general, has been a challenge for professionals in the area, since dealing with its importance in transiting and occupying different spaces in school with the aim of enhancing the students' learning, brings by itself the need to implement different methodologies in the daily practices of professionals involved in the process of teaching and learning. It is worth saying that the classroom - par excellence, the organizing place of this process - can also be used as territory of action of the counselor. According to Paro (2015), the pedagogical process of teaching/learning constitutes true human work, which supposes the existence of a work object that, in this case, is the educated student himself". The educated student is, therefore, the product of work. Therefore, it is fundamental to understand that the result of a good lesson is learning on the part of the pupil. The productivity of the school is measured, therefore, by the achievement of its product, that is, by the proportion of its students that it manages to change to appropriate the knowledge historically produced. This supposes to say that good school involves teaching and learning, or rather, conjectures to consider that there is only teaching when there is learning. According to De Souza (2019), the educator, one of the protagonists responsible for the motivation of students, needs to understand the importance of education as a tool for insertion into the labour market and further studies and, mainly, preparation for life. But the educator cannot walk alone. Faced with the challenges found in school when it comes to the role of the Educational Director Pedagogue, it is worth stating that this professional, as an agent of integration between students and teachers and a link to support the teacher, should constantly rethink their role and performance in the search for improvement in learning and seeking to broaden the vision of a joint planning in the educational process. For that, it is important the educational practice mediated by innovative methodologies, as well as the consensus among the professionals involved in the individual formation process. The active methodologies, which began in the 1980s, sought to respond to the multiplicity of factors that interfere in the learning process and the need for students to develop diverse skills. It was necessary for the student to acquire a more active and proactive, communicative and investigative role.

The result according to Do Nascimento and Feitosa (2020, p. 62- 68) is that: In a way, these methodologies oppose methods and techniques that emphasize the transmission of knowledge. They advocate a greater ownership and division of responsibilities in the teaching-learning process, interpersonal relationships and the development of capacity for self-learning. The teacher's role was also rethought; it went from knowledge transmitter to monitor, with the duty to create learning environments full of diversified activities. The active methodology, focused on the study of mental processes related to learning, has given an important contribution to the knowledge of learning processes, memorisation, critical analysis, comprehension and attention. Research in conceptual understanding and problem solving was very much focused on investigating difficulties in learning and for this purpose they developed strategies and curricula to exclusively combat these difficulties. Understanding how students learn brought a new breath, to understand that the

## ***The importance of the environment in everyday school life: working with deaf students using active methodologies***

massive production of materials was insufficient to improve the learning process. In this sense, Mota and Rosa (2018, p. 261-276) highlights that: Learning is changing the brain, increases the survival and complexity of new neurons. The understanding of the biological mechanisms underlying learning has helped to design new and more efficient strategies to promote the acquisition of knowledge and skills. This area has shown that the brain needs time to assimilate, that emotion has implications for learning and has stressed the importance of learning in a context, making the most of situations experienced in everyday life.

The teacher is seen as a knowledge mediator who creates and develops learning environments and shares with students the responsibility for the act of teaching and learning. The identification of what the student already knows and the feeling he has about himself are essential mechanisms, as they mobilise the whole structure of thought. For example, the identification that he/she has difficulties in a certain subject may lead him/her to pay more attention to the teacher's explanations, or to give up his/her understanding more easily (ZIMMERMANN; MARTINS and DA ROSA et al, 2020, p. 338-355). According to Assis (2020), based more specifically on the constructivist perspective, metacognition emerges as a strategy capable of making the student responsible for the analysis, regulation and evaluation of the mechanisms that promote their learning. One of the suggestions is to bet on teamwork. By discussing with their peers, students activate their cognitive structure and may become aware of what they are doing. Unconsciously and insistently, they seek the knowledge already existing in the cognitive structure. This search stimulates the creation of new knowledge and contributes to the control of their mental processes and, consequently, to the improvement of the cognitive structure. It is up to the teacher to help the student to feel comfortable with their own mistakes. Students should recognise that they can succeed if they learn the right strategies. Their confidence level can increase if the teacher introduces the importance of developing metacognitive skills and the difference between reading and learning what they have read. On the other hand, it is important for students to solve problems other than those that gave rise to the knowledge, as this helps them to think creatively and critically. Furthermore, it is important to show students the importance of taking significant time to identify problems with others already solved (identify the task and the strategy used), as well as trying to plan the action to be taken to solve the proposed problem. In addition, it becomes fundamental to compare their resolution with solutions already presented, evaluating them and reflecting on the results and paths taken (SILVA, 2019).

### **2.3 Use of active methodologies in the teaching learning process: pedagogical practice based on primary schools**

Curricular changes presuppose the passage from disciplinarity to interdisciplinarity, in addition to presenting new teaching and learning strategies, such as active methodologies, considered a new challenge for the teacher training of the future (SILVA, 2015). More than enabling the mastery of knowledge, we believe that there is the need to train teachers who learn to think, to correlate theory and practice, to seek, in a creative and appropriate way to the needs of society, the resolution of the problems that emerge in the day to day of the school and in everyday life. According to Martins et al (2019), teachers able to aggregate for themselves transformations in their practices, since the traditional method has proven ineffective and inefficient due to the demands of social reality, the urgency to expand school and cultural access of the less favored class given

## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

the technological and scientific advancement. The active methodology is an educational conception that stimulates constructive processes of action-reflection-action), in which the student has an active posture in relation to his learning in a practical situation of experiences, through problems that are challenging and allow him to research and discover solutions, applicable to reality. These principles are guided by the problematization method, and problem-based learning (PBA). De Souza and Antonelli (2016) state that Problem-Based Learning (PBA) is a method by which the student uses the problem situation, whether of a health care issue or a research topic, as stimuli for learning. After an initial analysis of the problem, students define their learning objectives and search for the information needed to address the problem. Then they discuss what they have found and share what they have learned. The seven steps of the tutorial process in Problem-Based Learning are: 1. presentation of the problem (reading by the group) Clarification of some unfamiliar conceptual terms and doubts about the problem. 3. Definition and synthesis of the problem under discussion, identifying the relevant areas or points. 4. Analysis of the problem using the previous knowledge (brainstorming) 5. Development of hypothesis to explain the problem and identification of knowledge gaps Definition of learning objectives and identification of appropriate learning resources. 7. information search and individual study.

As Soares et al (2017) point out, in ABP, the teacher/tutor has an important role, which is to allow the student to take ownership of the problem independently and autonomously. This methodology requires an effort from teachers in order to provide models and teaching scenarios that allow work and learning at appropriate levels of complexity and relevance. Regardless of its great potential, Problem Based Learning (PBL) has advantages and disadvantages. Both in ABP and in the Problematization Methodology, the use of problems is the natural process of meaningful real-life learning in the knowledge construction process. Learning isolated topics does not allow situations to be analysed. In the view that students and teachers are in a constant process of interaction, it is worth pointing out that rethinking or modifying the role of one implies reviewing the role of the other. Thus, the role of the student will also go through a process of transformation, he stops being underestimated to become an active and participatory student in the process of knowledge construction. When addressing this issue, Normando (2019) points out that the teacher, by shifting the exclusive attention from the knowledge he teaches to the people to whom this knowledge will be taught, feels the imperative need to redo a reflection on the meaning of his work. For the author, this reflection should have both an individual dimension (self-reflection) and a collective dimension (shared reflection). It is essential, therefore, the formation of a practical-reflective teacher, endowed with knowledge and skills and, above all, able to reflect on their practice.

And according to Massetto (2018), the skills considered fundamental for the professional training of students should be explicit in the pedagogical projects of the courses, projects in general articulated to the pedagogical principles that structure and shape the institutional pedagogical project, in line with the regional vocation that constitutes the institutional mission and its implications with the teaching planning. This is the moment to reflect on our role as educators, the scope of our subjects, our performance, the depth of the activities we present to students, creating a necessary space to share new pedagogical practices with other colleagues. These reflections will lead to the emergence of boldness and creativity that, together, are necessary



to understand and transform the teaching practice, in order to provoke in students the critical reconstruction of the complex world in which they live, as builders of the subject and rebuilders of culture, through a dialogical, inter, multi and transdisciplinary approach.

According to Araújo (2020), with the advancement of technology, the teacher needs to be increasingly prepared to involve the student in the classroom. For such, it is notorious the increasing use of active teaching learning methodologies, which inspire and motivate to learn in a pleasurable way. In this sense, the following question arises: What is the perception and how learning happens when active methodologies are used in the teaching learning process. Facing the competitive market, it is necessary that the teacher has a series of skills and competencies to work in education, among them stand out creativity, through it you can create competitive strategies aimed at stimulating the learning of the student instigating him to learn more actively. Thus the use of the tools of active methodologies in teaching learning, besides being a necessity is also a competitive advantage for the teacher.

### **III. Materials and Methods**

#### **3.1 Materials**

For the composition of the construction process of this article, we started initially, what comes to be a Qualitative Research, which in turn according to Minayo, Deslandes and Gomes (2016), allows us an interaction and face to face contact over time with the subjects participants, whose goal of the analysis are the active methodologies worked with the "deaf" subjects, having the task of counting and quantifying people or opinions, however, demonstrates primarily the goal of exploring the composition of social representations and opinions on the target theme. The qualitative method reiterates the performance focused on personal experiences and relationships. The entire author also states: This study of the material does not need to cover all the speeches and expressions of the interlocutors, because, in general, the sociocultural dimension of the opinions and representations of a group that has the same characteristics usually has many points in common while presenting singularities peculiar to the biography of each interlocutor. On the other hand, we should also consider that there will always be diversity of opinions and beliefs within the same social segment and the qualitative analysis should account for this differentiation. (Minayo; Deslandes; Gomes, 2016, p. 72). In addition to the Qualitative nature, the study is characterized as an essay, encompassing the objective of conducting a critical literature review of the subject matter presented. Therefore, this study will be formatted as a research conducted from records already accessible derived from research previously conducted, so "the texts become sources of the topics to be researched. And the researcher works from the contributions of the authors of the analytical studies contained in the texts" (Severino, 2016, p. 131), starting from the notion of the social construction of the realities under study, being interested in the perspectives of the participants, in their day-to-day practices and in their everyday knowledge in relation to the study. The chapter dialogues with the idea of the authors pointing out the main considerations on the theme in question, which consists of a field research, since it aims to observe, collect data and information in order to identify and analyze a problem, which is proposed to find a possible answer, or even discover new cases or relationships between them. For the development of the research, we used the case study as a method. "The case study method allows an

## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

investigation to preserve the holistic and significant characteristics of real life events, such as: individual life cycles, organizational and administrative processes...". The research privileged the following stages: a) bibliographical and documental research; b) field research, at Augusto Carneiro State School; and c) analysis and reflection on collected data. The bibliographic and documentary research offered us subsidies to understand the various teaching methods aimed at deaf students and how some of them did not produce satisfactory results in the educational development of these students. As a source of data collection, the semi-structured interview was used as an instrument, being held with the following subjects: a manager, a pedagogical support, two deaf teachers and two listeners. According to Silva (2019), the interview is "a meeting between two people, in order for one of them to obtain information about a particular subject, through a conversation of professional nature". The interview questions were designed for the teaching staff, manager and pedagogical support in a state school, in order to analyze the effectiveness of the application of knowledge about the environment in the school setting, putting into practice the active methodologies.

The interview script was prepared so that the questions made reference to the axes of analysis. Thus, similar questions were included for the four types of subjects participating in the research. They aimed to discuss the methodology and methods used in the school, the performance and training of professionals, the knowledge of the actors involved in the teaching and learning process about the documents that guide the school work, the evaluation system, the developed planning, among others. According to Silva (2019), data collection was carried out through observation made through notes about the school daily life and application of the interview, in addition to the reading of some school documents related to the research theme, such as the bilingual curriculum proposal, the school PPP and educational documents displayed on panels distributed by the school, which helped us during the process of data analysis of the answers given to the eight closed questions, very simple and objective regarding waste, pollution of the atmosphere, soil, water and human participation in this process. The research was operationalized through the presentation of the instruments (interview and observation) and their purpose to the school manager, as well as the letter of introduction to authorize the observation and application of the interview. Then, the same procedure was performed with the other interviewees. The time of application of the interview with the teachers was chosen, according to the availability of time, with preference for Pedagogical Working Hours (PTP). The interviews were conducted individually and recorded on video or audio. We opted for video recording for deaf teachers in order to maintain the reliability of their speech. The interviews with the manager and the pedagogue took place at the time provided by them, following the same recording procedure for listeners, that is, audio recording. According to Santos (2022), some questions aimed to identify how the understanding of who is the deaf subject and the pedagogical practices of the school influence the students' learning and how these practices are performed. The institution chosen as locus of the research is located in the South Zone of Manaus (AM). The inclusion criterion was because this school works with Special Education Care for deaf students. The research subjects were 08 students from the 5th year of primary schools, morning shift, along with the class teacher, where we suggest activities, using educational strategies, such as: alphabet in pounds, dominoes, drawings, structured and unstructured materials, organized by the researcher. In this context, it was necessary to establish an investigative path to meet the research objectives, characterized by three moments. According to Carvalho

***The importance of the environment in everyday school life: working with deaf students using active methodologies***

et al (2021), in the first moment we conducted a survey and bibliographic research in books, scientific articles (journals), dissertations, theses and technical documents of relevance in the area of Special Education, in order to know what are the theoretical assumptions that underpin and guide the process of diversified methodologies. The second moment consists in the techniques of data collection and procedures, and to accomplish the first objective that consists in understanding how the learning process develops in the child, aiming to potentiate the cognitive development and the production of knowledge in education, and the active methodologies that professionals can use during the training of deaf students. In the third moment we used the conversation wheel, because it aims to establish a rapprochement between the researcher and the research subjects, in order to collect information about the possible understandings of the students on the theme. In view of all the historical modulations presented, Deaf Education has been presented currently with new proposals and methods for the teaching and learning process. Therefore, the questions that were proposed to the teacher of the Escola Estadual Augusto Carneiro dos Santos (EEACDS) were presented.

The observations were recorded in the field notebook and aimed to analyze the experiences and experiences of students, from the interactions, conversation wheels and semi-structured interviews, because according to the guidelines of Batista; De Matos, Nascimento 2017, p.23-38), meets mainly exploratory purposes, being widely used for the detailing of research and more precise formulations of related concepts, carried out during the research. The interview was held at the end of the class, and aimed to work the new knowledge acquired by students and teachers during the visit at school and the contributions of the students' participations in the proposed activities. In view of all the historical modulations presented, Deaf Education has currently presented itself with new proposals and methods for the teaching and learning process. Therefore, the questions that were proposed to the EEACS teacher were presented. In Chart 1 and 2, it will be possible to verify the questions that were directed to the teacher, students.

Table 1 - Questions asked to the teacher.

ARE THERE DIFFICULTIES IN WORKING WITH DEAF STUDENTS?
WHAT RESOURCES AND/OR STRATEGIES DO YOU USE WHEN WORKING WITH DEAF STUDENTS?
DO YOU BELIEVE IN YOUR STUDENT'S ABILITY TO LEARN?
WHAT METHODOLOGIES WOULD BE NECESSARY TO WORK ON THE SPECIFICITIES IN THE TRAINING OF DEAF STUDENTS?
DEFINE ACTIVE METHODOLOGIES
HOW IS THE ENVIRONMENT WORKED ON IN THE SCHOOL ENVIRONMENT?
HAVE YOU ALREADY RECEIVED TRAINING ON THE SUBJECT OF ACTIVE METHODOLOGIES?

ARE THERE ANY ACTIONS IN THE EDUCATION SECRETARIAT FOR THE TRAINING OF EDUCATORS ON THE THEME ADDRESSED?

Source: Authors, (2022).

Table 2- Questions posed to students.

HOW DO YOU "STUDENTS" FEEL WHEN THE TEACHER IS NOT ABLE TO TEACH THE CONTENT IN LIBRAS?
WHAT ARE THE MOST FREQUENT DIFFICULTIES YOU FACE IN YOUR DAILY WORK IN THE CLASSROOM?
ARE THE MATERIALS ADAPTED FOR YOU?
AS DEAF STUDENTS, WHAT DO YOU THINK COULD BE IMPROVED IN SPECIAL EDUCATION?
WHAT DOES INCLUSION MEAN TO YOU?
DOES THE SPECIALISED EDUCATIONAL SERVICE IN IBRAS PROVIDE THE CONCEPTUAL BASIS OF THIS LANGUAGE?
TEACHER WHO TEACHES IN LIBRAS IN YOUR OPINION SHOULD BE QUALIFIED TO PERFORM THE SPECIALIZED EDUCATIONAL SERVICE?
HOW DO YOU WORK IN THE CLASSROOM ON THE ENVIRONMENT AND ACTIVE METHODOLOGIES?

Source: Authors, (2022).

According to Mikalixem (2020), observing what were the contributions that acquired in this teaching and learning process, in order to achieve the third objective that consisted in demonstrating the active educational methodologies most used by professionals who bring an approach in context in the teaching and learning process, in training with primary schools students, who presents "deafblindness," were developed with the support of the teacher and the collaboration of students, complementary activities (music, painting with drawings, race, colour game, pet bottles etc.), based on the active methodologies used in the training of students. The field observed was a 5th grade classroom of the referred school, with 10 students enrolled. They present significant age/grade distortion, ranging from 10 to 14 years old. The teaching materials used by the teacher were playful materials (pet bottles, popsicle sticks, lids, gouache paints, string, plants, etc.) painting, reading and interpretation of the text all presented in Libras, being responsible for the Portuguese Language teacher. Students watched the material with interest, without questioning. At the end, the teacher made a summary of the work done by students all in Libras.

The floor was given to other teachers and students from other grades who witnessed the presentation of the students in the realization of the work. The teachers requested that the head teacher of the 5th grade

## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

asked the students how it is to work with active methodologies in the classroom. Then, teachers preferred to return with students to their respective classrooms and develop work related to the daily school life of each grade. After all classes left, the 5th grade teacher, focus of the observation, handed out a printed copy to each student with an activity about the class attended. She then explained, orally, what the students should do in the activity, while writing examples on the whiteboard. One student, orally answered the questions in writing beforehand and ran to show the teacher if she was right. At the sign of approval, she showed the answer to some classmates. Considering the initial proposal of the study that intends to analyze whether the teaching practices for deaf students of the Augusto Carneiro dos Santos State School are being effective in order to enhance the linguistic and cultural specificity of these students in order to assist them in the teaching and learning process, such material, confronted with the theoretical framework and the documents of that school, provides relevant elements to reflect on the pedagogical practices adopted by professionals of this educational institution.

Each stage had a varied time for the development of activities, according to the objective of each one of them. Generally speaking, the empirical knowledge of the students participating in the research is related to the aspects described in the theoretical framework. Performing a global analysis in the diverse conceptions of the students presented so far, it is possible to recognize that the characteristics of human development, explicit, based on the bioecological model of human development, are highlighted, pointing out the properties of the person based on this perspective: "they address both cognition in context and socioemotional and motivational characteristics' in intellectual development and its specificities and socioemotional and motivational characteristics, covering: performance, interest, curiosity, persistence, abilities and skills, among other aspects. It is also necessary to highlight that this teaching and learning process is extremely necessary to offer better conditions for the development of skills, abilities and talents of deaf students. In the first stage the students during the conversation circle (Figure 3) were led to reflection and came into direct contact with the materials, handling, knowing and comparing the materials already mentioned.



Figure 3: Students in the conversation round.

Source: Authors, (2022).



Figure 4: Presentation of structured materials.

Source: Authors, (2022).

In the second stage, students got to know the methods used (Figure 4) through games, dialogued and contextualized expository lessons, taught in Libras, by the Portuguese Language teacher of the school, who led them to the handling of materials, made by the researcher for the proposed activity, in the schoolyard. In the third stage, students were once again led to the schoolyard and, at this time, the whole procedure for the practice was performed, where the educational materials were shown, for students to know the different types of objects and the various ways of making the same. In this step, students were aware of

## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

the complexity of the production of structured and unstructured materials: dominoes, puzzles, colour game, alphabet, etc. After performing the activities, the students organized the materials and made a brief presentation, demonstrating how to work this methodology in the classroom, based on some questions proposed by the researcher. The teacher divided the questions into topics and each group was responsible for answering the interview that was made both for the students and the teacher of the class in question. After the interview, the 5th grade class collected the information from the answers and finally, the result of the interview was delivered to the Portuguese language teacher, so that it could be attached to the researcher's field notebook. And finally, in the third moment of the study, the data were interpreted through our descriptive analysis in loco, which aimed to describe carefully the facts and phenomena of a given reality, in order to obtain information about what has already been defined as a problem to be investigated. It is in this scenario that sustainable innovations may significantly contribute with active methodologies at institutions, as exposed in Figure 5.

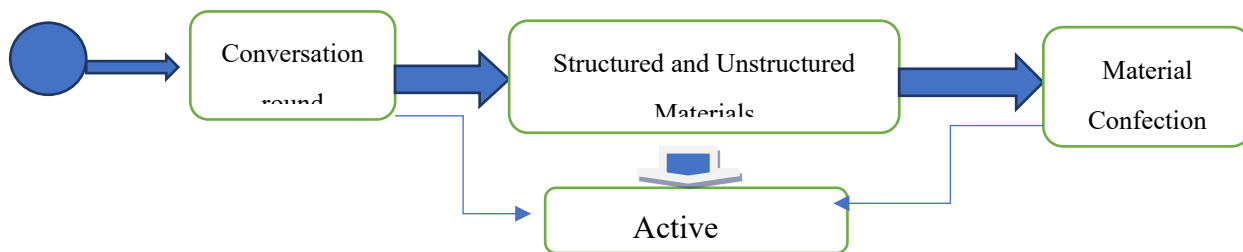


Figure 5 - Flowchart of the Active Methodologies Implementation Steps in the School Environment.

Source: Authors, (2022).

The involvement in these activities served as a source of information to know what processes were developed for the correct implementation of active methodologies, through records in spreadsheets of the sequence of operations performed, analysis of existing documentation (in the researcher's notebook containing data of acquisition of materials, records and the destination of these materials) and photographic documentation. This analysis generated flowcharts of the process, to identify opportunities for improvement, as well as assisted in the preparation of the model of active methodologies proposed for students.

### **3.2 Methods**

The methods achieved with the students of the EEACS, are the most varied, considering that the proposed activities and the semi-structured interviews, made possible a greater condition for the insertion of characteristics. It is observed the highlighting of characteristics related to learning, behaviour and special talents. It is important to highlight that the specificities pointed out as positive, in the development of the learner, are not always considered so by the educator, especially when the pedagogical practice developed in the classroom is based on traditional teaching theory. According to Almeida (2015), in the traditional pedagogy approach, the learning assumptions are centred on the idea that teaching consists in passing on knowledge to the child and that the child's capacity is identical to the adult's, only less developed. Educational programmes

***The importance of the environment in everyday school life: working with deaf students using active methodologies***

are developed in a logical progression, established by the adult, without considering the peculiar characteristics of each age. Moda (2017) points out that, in the current context, there is no more room for arbitrariness in imposing what and how it should be learned, because there is an urgent need to rethink this action, as the school space needs to be a space where the student is a builder of his knowledge, where the educator should provide learning situations for the learner to act on the object of knowledge. In the educator's answer, it is possible to notice the highlighting of several aspects of human development, which can be grouped in the students' abilities. Intellectual, psychomotor, being characteristics of deaf students. In this sense, if the educator does not exercise a pedagogical practice focused on the learning of the student, for the construction of knowledge, it will become increasingly easier the recognition of talents, stimulation for their development and the provision of an education really focused on meeting the special educational needs of learners. According to Da Rocha (2021), this is a way of perceiving the student as compartmentalized, i.e., only the curricular contents are considered learning in school; however, outside of it, society demands much more from citizens, it demands to know how to work in teams, creativity, autonomy, mastery of technology. Therefore, why are creativity, artistic expression and other talents not valued as much as academic contents? If school and society do not rethink this action that does not stimulate creativity, many talents will be wasted and it will not only be the individuals who will be penalized with this "castration" of potential. Society will also lose potentials that could be invested in social, cultural, economic and political advancement and well-being. In Figure 6, we organized the observations based on the development of the students.

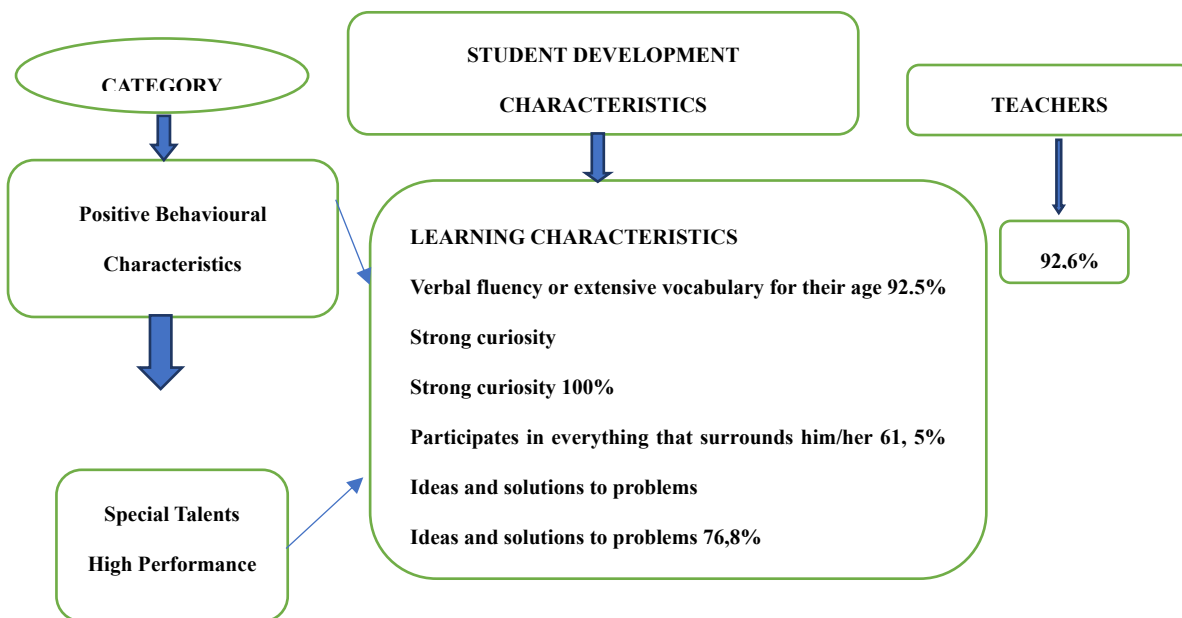


Figure 6: Flowchart of Special Talents Development Observations.

Source: Authors, (2022).

The educator needs to be constantly renewed, updating their knowledge so that they can transmit the issues safely in their function, this is necessary because there is a large number of educators who do not follow the evolution of teaching and undermine the formation of the student. The qualified teacher improves the

quality of teaching, motivates the student, making him/her aware of the situation and building an efficient learning process.

#### **IV. Results and Discussions**

In view of the statements Câmara et al (2018), highlights that, of all the historical modulations presented, Deaf Education has presented itself, currently new proposals of methods for the teaching and learning process. In addition, there have been changes regarding the conceptions about the deaf subject, about the educational policies and about the descriptions around the Sign Language. The teaching practices of EEACS have changed over the years and according to the current legislation, as described in the Curricular Proposal of the school. The institution was created, initially, with the purpose of serving deaf students, based on the oralist educational approach, which was characterized "by learning the Portuguese language in its oral and written modality in school, by understanding that this was the only possibility of integrating the deaf in the majority hearing society".

Regarding the contributions of active methodologies applied to school it was possible to verify that the results show that students understood it as a fundamental process to disseminate and clarify doubts regarding the applicability of the methods and the impacts that the activities of each one can cause to the environment, and/or in other areas, creativity, body expression, music, etc. We agree with the students who point out that the main contributions are conscious consumption, economy, better use of resources, recycling and reduction in waste generation. From this perspective, it is understood that the change in behaviour is a consequence of the awareness process. To analyse the processes and/or approaches, the observational method was used to help diagnose the active methodologies in the students' teaching and learning process. The observation of the procedures of the techniques of application of the activities, and behaviors developed in this institution, related to the prevention and/or environmental conservation was performed. The documentary evaluation of the procedures adopted by the researcher consisted of the analysis of standards and routines in the classroom and class, contributing with the results achieved, it was possible to gain access to significant educational experiences. The results of semi-structured interviews and questions applied to students were exposed in graphics in order to facilitate the reading of the answers attributed to the eight closed questions, very simple and objective regarding the rubbish, the pollution of the atmosphere, soil, water and human participation in this process and active methodologies. Figure 7 shows the first question that inquires about the teaching performance of the teacher in the classroom, the students had the opportunity to assess their own behavior as a conductor of learning. In summary, the numbers indicate that only 08 students had difficulties to conduct the process, it is worth mentioning that during the conversations, 05 female students reinforced the challenge of developing environmental practices in the classroom. The Portuguese Language teacher and the researcher took the first steps by organizing goals and objectives for the implementation of the activity, which at first worked structured and unstructured materials, such as pet bottle game, puzzle made with popsicle sticks, painting with the colours of selective collection, pet bottle, flowers made with the colours of selective collection, activities made for students to do, plants that were planted in the school garden and painting with the colours of selective collection.



*The importance of the environment in everyday school life: working with deaf students using active methodologies*

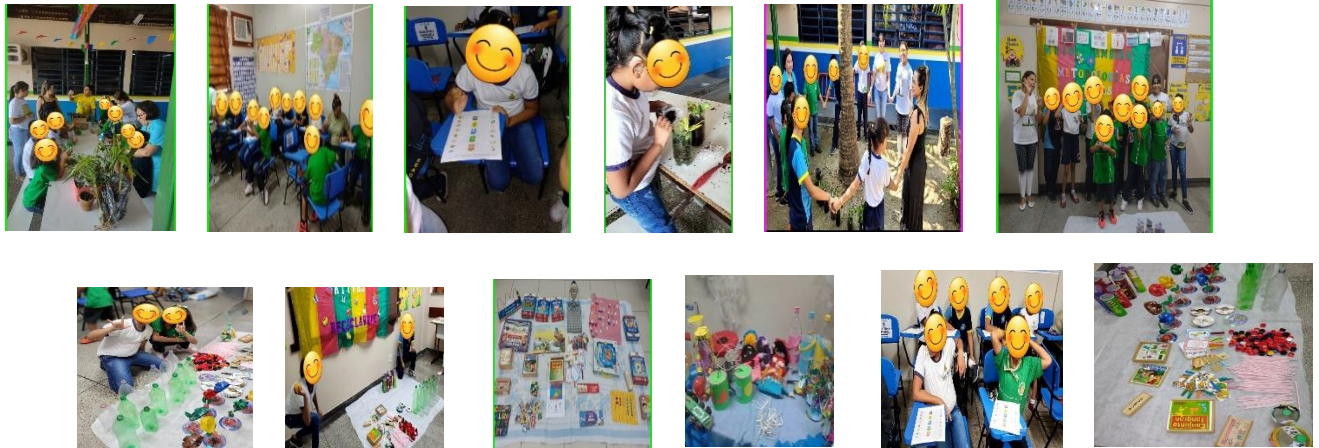


Figure 7 - First questioning that inquires about the teacher's teaching performance in the classroom.

Source: Authors, (2022).

Living together and learning to deal pedagogically with these differences is one of the items that the new educational requirements propose to the professionals involved in the education process. Thus, the results to be presented are in accordance with our evaluation during the research at school, where some information was obtained based on the proposed approach. We know that the motor development of children during the early stages, advocates that children develop, build and acquire knowledge and become autonomous and cooperative. Therefore, it is necessary a space for the playful, affective, artistic, creation and exchange of experiences. With this begins the process of acquiring cognitive knowledge, realizing the importance of working from the beginning of the process of training students through diversified and playful methodologies. The graph in Figure 8 illustrates the first questioning which inquires about the teaching performance in relation to the possibilities of evaluating their own behaviour, giving them access to the theoretical and practical knowledge established by the society of which they form a part.

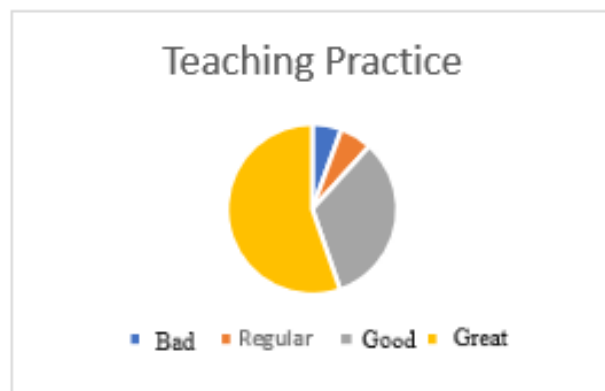


Figure 8- Graphic of Teaching performance.

Source: Authors (2022).

The graph in Figure 9 inquires about the domain of children's attention during the activities, since the

***The importance of the environment in everyday school life: working with deaf students using active methodologies***

attractive classes happened simultaneously, causing the active subject to use strategies in order to perform the activities with children and still collect data for your research, given that each child would answer the questionnaire with questions, containing the result of each activity. The development of a pedagogical practice that has as purpose the integral development of the children, therefore, focused in the language, in the expression, in the space to play, in the interdisciplinary appropriation of knowledge, has much to contribute in dialogue with the fundamental education. Thus, the play is integrated with care and education, because the play as a social activity of the human being allows the child to appropriate the world through the production of human actions.

Translated with [www.DeepL.com/Translator](http://www.DeepL.com/Translator) (free version)

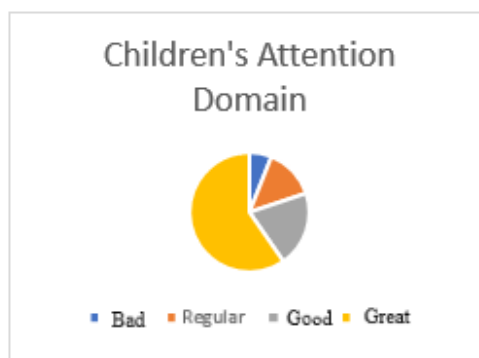


Figure 9 - Graph- Children's Attention Domain.

Source: Authors, (2022).

To raise awareness in a group, it is first necessary to define what is wanted and what is to be achieved. In order to arouse interest in the student, it is necessary that the teacher uses the "baggage of knowledge brought from home" by the students, thus making them realize that the environmental problem is closer to everyone than they imagine. Then, explain that the environmental impacts existing in the world affect all living beings because of the attitudes of some people who think that they alone are no use trying to preserve the planet. From the moment the individual realizes the existence of a whole, leaves aside the single existence and starts noticing the presence of the other, the planet will move towards a natural balance, as shown in Figure 10.

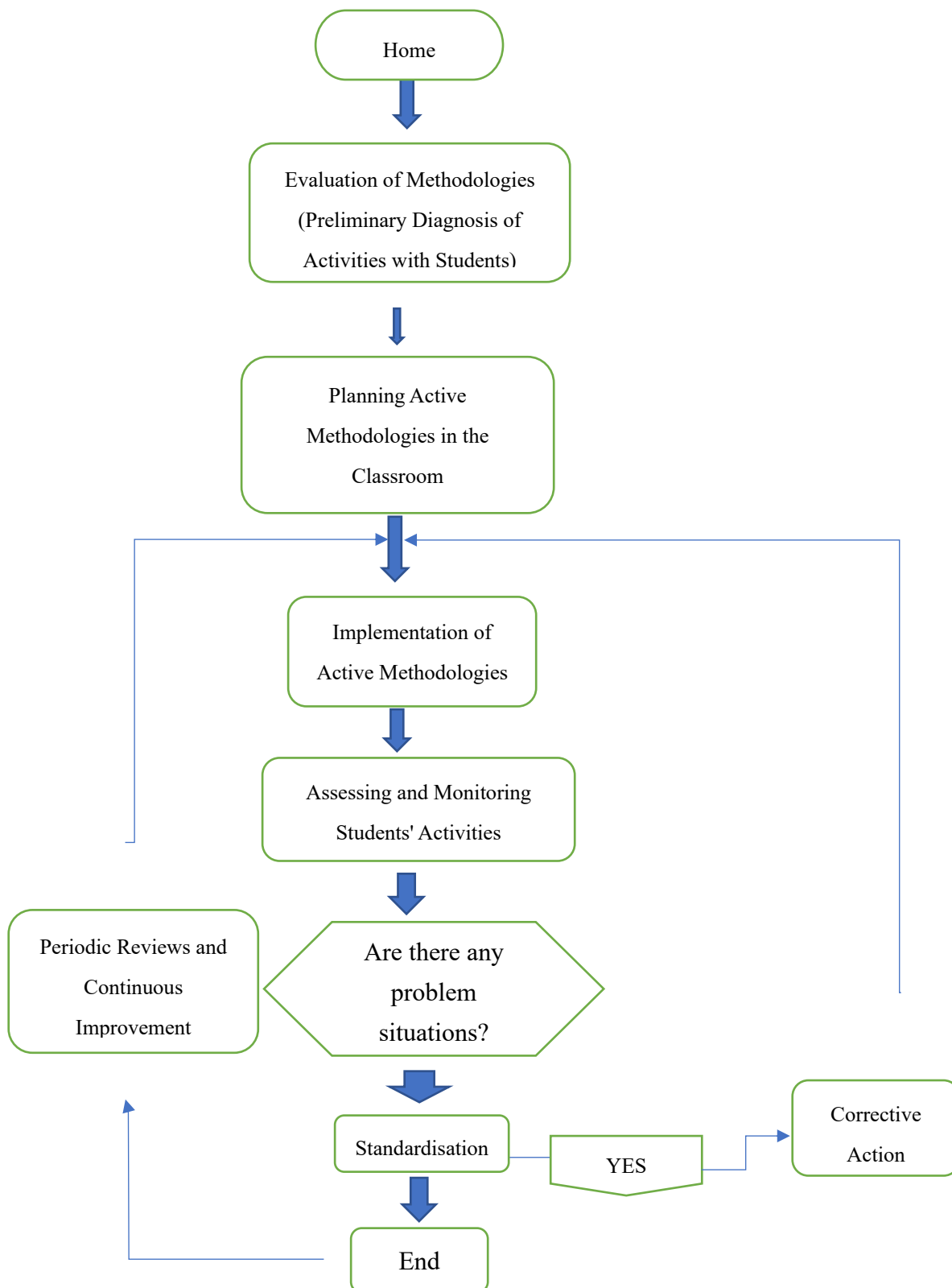


Figure 10 - Proposed Flowchart of the Active Methodologies in the Classroom Environment as a result of the activities in the Teaching and Learning Process of the deaf student.

Source: Adapted from Carreira (2017).

**Stage 1:** *Evaluation of the methodologies (Preliminary Diagnosis of Activities with Students): Preliminary diagnosis, in order to obtain success in the implementation of active methodologies. There are several tools that can be used to identify the probable difficulties that are faced, such as: survey of actions*

## ***The importance of the environment in everyday school life: working with deaf students using active methodologies***

*already used, pointing out the possible reasons for success or failure; the study of the organizational climate and the environmental history of the school.*

**Stage 2: Planning of Active Classroom Methodologies:** *based on the identification of environmental aspects resulting from classroom activities, the most relevant and significant impacts should be selected. It is up to the school to choose the pertinent tool among several existing in the literature. In order to control materials, analyses and modifications, it is recommended that the school has an internal system of control and evaluation in accordance with current legislation. It is essential to have knowledge of the environmental aspects related to the activities, and pedagogical knowledge in order to carry out an effective analysis of its applicability. The objectives and targets should be established based on the prioritisation of significant environmental aspects and impacts of the school, identified in the pre-diagnosis.*

**Stage 3: Implementation of Active Methodologies:** *The successful implementation of the active methodologies requires the commitment of all staff, managers and teachers of the Institution. This starts at the highest management levels of the school where senior management establishes the environmental policy and ensures that this system is implemented. As part of this commitment, the school designates a specific representative with defined responsibility and authority for the implementation of the active methodologies. It also establishes and maintains the resources for identifying the training needs of teachers.*

*Through this strategy, the teacher manages to make the student aware of the current relevance of various issues worked in the classroom, understands how certain worldviews still exist and is able to position himself as a historical subject able to make the changes he considers necessary around him. It is also up to the teacher to choose the strategies that will be put into practice according to the age group and maturity of their students, reiterating that the teaching positions should always be based on the development of cognitive and non-cognitive skills in order to stimulate their students to develop and acquire new knowledge, not up to the teacher. It is recommended to prepare a "Didactic Manual" with Standard Operating Procedures which, in addition to the procedures worked out, contains corrective actions, routines in learning environments, work instructions, worksheets and forms containing the materials and educational proposals for the teaching of classes.*

**Stage 4: Evaluation and Monitoring of Students in the Activities:** *It is necessary to carry out these procedures to ensure continuous improvement of environmental performance in education. It is known that this type of methodology arises to overcome with the traditional models, with strictly expositive classes, where the student is passive of the knowledge, with attitudes of just listen, memorize and repeat the presented contents. In this sense, the purpose of the Pedagogue's work is to stimulate teachers to develop teaching practices with innovative methodologies aimed at developing teaching in the search for solutions to problems, in which the student is able to stand out autonomously from the problems and the result is satisfactory and effective.*

*The educational practices conducted by the researcher are relevant to the process of continuous improvement of the school is ensured at the strategic level and cannot fail to mention that training, professional training of those involved in the process of teaching and learning, including managers, in understanding the purposes of educational guidance as a mediator in this process is essential for the results in the implementation of active methodologies in institutions. The results obtained in pedagogical practice*

## ***The importance of the environment in everyday school life: working with deaf students using active methodologies***

*provided subsidies to perform this analysis, essential to a permanent evaluation of the policy established by the school, enabling course corrections and / or standardization, as well as establishing new objectives and goals, seeking to improve and enhance the active methodologies within the school. Other relevant aspects that should be mentioned, are directly related to differentiated pedagogical practices, among them, problem-based learning, which as already said, is part of the list of the various types of active methodologies, which is characterized by aspects such as motivation activated by the dynamism of the activities; the integration of knowledge; the development of critical thinking skills; and the interaction promoted and interpersonal skills achieved. The reports and findings presented and analyzed so far represent some aspects of the EEACS, that in face of the exposed, the results point that for the researched subjects, predominates association that the deaf students are directly associated to the development above the average of, however it may be related to different stages of knowledge, that is, it is necessary to consider the global aspects of development of the subject to associate them to potentials in education. In this way, the students will be actively participating in the construction of the lesson, enriching it with their knowledge and their doubts, allowing the teacher to act as an effective mediator between his class and the content, and not as someone who is the exclusive holder of that content explored. Given the methodological procedures adopted for this research, it was found that environmental education at school has been worked continuously in primary schools, but not with the commitment of the whole school community. Below are some questions from the interview conducted with the students subject of the research, and the class teacher. This question of the interview to the students and the class teacher is configured as semi-structured once it was made possible to the students to highlight aspects beyond those that were arranged in figure 8 of the proposed flowchart of the Active Methodologies in the classroom environment as a result of the activities in the teaching and learning process of the deaf student.*

In the case of the interview with the teacher from Seduc, there was ample opportunity for answers, considering that the questions were characterized as semi-structured, allowing argue and justify their answers, when necessary. This category highlights the educator's knowledge regarding the existence or not of educational services in the city of Manaus, especially in the Augusto Carneiro dos Santos State School, directed to deaf students. The results point to a full appreciation of the development of capabilities in diversified activities, challenging and creative whose role of the teacher is not characterized by trying to determine the way of thinking of the student, but to guide the activities so that creativity and multiple talents of students emerge, through thinking, imagination and construction of new possibilities before the subject. Therefore, based on this script we will present the answers given by the students and the Portuguese Language teacher. For this, we will use fictitious names to avoid exposing the research subjects when reporting the experiences and opinions of the interviewees. The VLP educator complemented the information about the attendance in AEE, and the active methodologies in the teaching and learning process with deaf students. The questions that enabled the achievement of the results were:

Interview- Question 1: Are there difficulties in working with deaf students? The results achieved with the teacher from Seduc, indicate that "yes", justifying her answer as follows: there is provision of care in special education in the state. It is noteworthy that the teacher points places that are already serving deaf students, but a service that needs to be more specific and improved, and especially to train teachers in the area

## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

of Libras. Education for citizenship requires, therefore, that social issues are presented for learning and reflection of students, based on these ideas, from their own daily life makes it possible to see the environment as a construction of identity and learning, favoring intellectual growth and for this, it is essential to know and work with elements and various forms of learning. It is worth noting that the reflection of the VLP educator, about the difficulties of working with deaf students, is to prioritize a quality education so that they can interact and socialize with the environment in which they are inserted. In this sense it is pertinent, especially after the analysis of the document prepared by the MEC, which states that: Although the special needs at school are wide and diverse, the current National Education Policy points to a definition of priorities regarding the specialized care, to be offered at school for those who need it.

Interview- Question 2: What resources and/or strategies do you use when working with the deaf student?

The resources are based on the PCNs and curricula, but it is necessary to adapt so that students can understand the content well. Because most students arrive in school knowing only L1 - Libras, their mother tongue, and L2 which is the Portuguese language, it is necessary to teach. For this reason we educators need to be prepared to receive them and teach the content according to the students' learning level. Again, our interviewee shows a lot of insight and clarity in her information, when asked if she believes in her student's ability to learn, she clarifies that 'each student has a different potential from the other and the ability to learn will depend a lot on the teaching and learning process'. It stands out more, in the educator's speech, when asked about the methodologies needed to work with the specificities in the training of deaf students, she says that: For them to have real conditions to identify the potentials and talents of students with deafblindness, it is necessary this adaptation of the teacher, so that then it can be worked the specificities of each student according to the educational potentialities of each learner. In this perspective the teacher CS points out to be necessary, that teachers are trained to work methodologies during this training process with accredited people, and that this subject is addressed more often in refresher courses for teachers and educators of SEDUC. There were no difficulties in working the methods applied in the classroom with printed activities, and also in the schoolyard with structured and unstructured materials. For this reason that should be paramount the training of deaf students, because these methodologies and/or teaching strategies bring positive results, regarding the improvement of Basic Education, in a perspective of directing new looks to the availability of each student.

Interview - Question 3: do you believe in your student's learning capacity?

Yes, since the deaf subject presents several characteristics, we can highlight that, for the development of a pedagogical practice that meets the diversity, it is essential that the educator is sensitive to the needs, to the learning and development characteristics and to the educational peculiarities of each student. Thus, the planning of the proposed activities in the classroom will reflect the inclusive education proposal, i.e., a practice based on respect, appreciation and stimulation and educational intervention according to the special educational needs, not only of deaf students, but with all students. Importantly, among the characteristics cited by the educator VLP, it can manifest itself positively and negatively, in the classroom, that is, depending on how the learner uses his leadership skills, this behavior will promote social welfare or not.

Interview- Question 4: which methodologies would be necessary to work the specificities in the training with

## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

deaf students? The deaf subject is a very observant and visual being, in this sense the methods to be worked are the ones that best fit within the student's perspective, as they are very visual, it is necessary to use materials of easy understanding and assimilation. It is worth remembering, that in schools that use a rigid and flexible curriculum, where the objectives, resources and strategies used consider the specificities of the various socio-cultural contexts. Thus, it needs to offer teaching proposals for, through a methodology that is easy to understand for each learner, aiming at the development of both the student and the teacher, in this space where knowledge will be cooperative and mutual.

Interview - Question 5: Define Active Methodologies. Active Methodologies is a model of education based on constructivism, in this sense the student becomes the builder of his own knowledge. Another point to be considered in active methodologies is that the student's interest for more advanced knowledge is a repertoire of information of the student more enriched, can be generate in the student high skills, curiosity of the student to learn through activities that stimulate him to think, build and conquer new knowledge.

Interview - Question 6: Have you received training on the subject Active Methodologies? No, but it is necessary to create, in the educational context, spaces for the development of diversified, challenging and creative activities, whose role of the teacher is not characterized by the attempt to determine the way of thinking of the student, but to guide the activities so that the creativity and the multiple talents of the students emerge, through thinking, imagination and construction of new possibilities before the exposed problem.

Interview- Question 7: Are there actions in the Secretariat of Education in the Formation/Capacity Building of Educators within the theme addressed? The Seduc teacher VLP, was unanimous in answering negatively, that does not know in the city of Manaus, some educational methodology directed to the development of deaf students. However the educator who works at Seduc, complements the following: Inclusive education for the deaf is still a controversial theme for the deaf community, since there are several studies that defend different views on the subject. It is noteworthy that the deaf culture has its specificities. Due to the historical educational context of the Deaf Community, today education for the deaf is still lagging behind.

Interview - Question 8: How is the environment worked in the school environment? When asked about the theme MA in the school setting, the teacher says that: It is enjoyable, the teacher needs to be constantly tuned and fed back, as an observation tool, and one cannot expect this to be a ready and finished learning, after a few explanations. It is necessary to instruct and prepare the teacher, not only on the occasion of filling out the observation sheet, but also for him/her to keep in mind the characterization, his/her way of being, acting and reacting, to know how to deal with issues involving precocity and rhythm of production and depth and differentiated qualities of human talent, and forms of expression not common to classroom work. The school has to be attentive in this search for methodologies that make a difference in the lives of students and the environment provides this theme. When the researcher brought this approach for us to work the active methodologies in the environment, it was gratifying to see the students' performance in classroom practice.

It is still possible to register some definitions for environment in the view of authors from various areas of knowledge, which explains its scope, as well as the need and importance of a contextualization based on an interdisciplinary view that the theme requires. When asked about the importance of the environment for society, the teacher said that everyone needs to do their part, so that the environment is not destroyed more quickly by

## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

the waste that is daily dumped by humans into the environment where they live, the forest, rivers, streams, etc.. The environment is then seen as a resource to be used and as such should be analysed and protected, according to its different conditions, in an attitude of respect, conservation and preservation. The environment or milieu is socially and historically constructed. It is built in the process of continuous interaction between society in motion and a particular physical space that is constantly changing. The best way to work this methodology is to bring recyclable materials to school, which can be transformed into utilities for work in the school environment itself, aiming at a better productivity with students. Considering that students have difficulty in performing certain activities. The development of a pedagogical practice that has as purpose the integral development of the children, therefore, focused in the language, in their expression, in the space to play, in the interdisciplinary appropriation of knowledge, has a lot to contribute in dialogue with the primary schools. In this context, primary schools should be seen as a space that enables the experience of all dimensions of the child, being considered an active being, who produces culture, appropriating knowledge, developing practices of interaction with other people.

The results show that 87.4% of the teachers at Seduc agree that inclusion is an essential process, both socially and at school. For the educator VLP, this process involves the effective participation of students in all school activities, implies respect for difference, offering activities consistent with the level and development of the student; fighting prejudice and discrimination; reducing the number of sumo per classroom, offering resource room care; training and self-training of the educator; and building a space where attention, respect, patience, dignity and affection are present. Regarding the students of the Escola Estadual Augusto Carneiro dos Santos, the research intended to know what was the profile of the student to work the active methodologies in the environment. Still, we found that deaf students do not have a good academic development, which can be justified by the lack of specific materials (as signaled by the interviewees) and the teachers' lack of knowledge of Libras. The school has a differentiated curriculum proposal and matrix, which includes the discipline Libras, and specific content, which address issues related to culture and deaf identity, thus valuing the deaf subject in its linguistic uniqueness. The answers obtained by students were as follows:

Interview- Question 9: How do "you students" feel when the teacher is not able to teach the content in Libras? It's no use just "placing" the student in a regular class, if the teacher is not able to work with these needs. I think education systems need to invest in the inclusion of "these students", making the school welcoming and functional for all who are part of it. We observed that the resource room, where we students attend, both the regular classroom and the resource room, would be interesting if we had materials and teachers who knew L1. Inclusion is necessary in all segments of society, but especially the school, since it is the school that reproduces and maintains inequality in the country. But, for it to happen, in fact and real, it is necessary that our representatives were more sensitive and carried out public policies to offer a better and even the true quality of life that the PNE want. Public policies such as building schools, training teachers, adequate transportation and places for leisure. For inclusion to occur, first of all, serious public policies for education, then people's awareness that we are all different and the commitment of the professional in the area. Public policies: training, reducing the number of students in classrooms (LL1). There is inclusion when the teacher works in a way focused on the students' needs, doing work where the student develops his/her potential, there



## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

has to be attention, patience and appreciation. Thus, all of us students win, are benefited and without discrimination. For inclusion to happen, it is necessary training by the secretary and self-training by the teacher. When we, participate in the resource room, I think that is being included participating effectively in a process, fruit and an updated policy and focused on us students (LL2).

It is necessary to prepare teachers. Inclusion is a right of all students and a duty of the State, however, including just for the sake of including does not help. It is necessary that we students have conditions and support to show our abilities, without resources, I think it is kind of dangerous for us. Inclusion would be an opportunity for us to have normal coexistence with other students, if treated equally, without discrimination, so that it occurs it is necessary to prepare the teacher (classes, tapes, video) with the different needs of students. Interview- Question 10: What are the most frequent difficulties that you face in the classroom? Undoubtedly are the adapted materials and teachers who most often do not know how to communicate in Libras. Preparation of the school community and families, awareness of society, teacher training courses. (LL3) I think the first step is to value and respect a human being; the second, as a student, realize that inhumane relationships and fight them; the third step is training and self-training.

Interview- Question 11: Are the materials adapted for you? Here is the paradox, according to the student LL4, we are limited to the works and materials provided by the school, and we only read in books, teachers seem to forget that this may be a reflection of what they are "sowing". In other words, only what is trained, stimulated, develops; and in this respect, many education systems may be failing, by favouring the development of only a very limited portion of the student's intellectual capacity.

Interview- Question 12: As deaf students, what do you think can be improved in Special Education? The training of teachers. It is important that teachers know more about the student who shows this type of disability, when the teacher demystifies their conceptions about the deaf student, there is a greater chance that this student "materializes" before the teacher, and the teacher sees the student as the others, with potentialities and difficulties, and thus, can help him/her. Alonso (2016) opines that the teacher of the common classroom must be prepared to receive each student, so that the inclusion is not only physical, but that there is a development of all in search of a meaningful learning for each student. The important thing is that the teacher is well prepared to meet these students, able to perceive the skills and talents, as well as the difficulties, often of emotional background, able to stimulate properly, respecting and knowing their social and family reality, knowing how to manage motivating and effective teaching strategies. In the words of the student LL5, inclusion is the acceptance of the deaf subject in any environment, be it school and/or social, on the other hand, there are those who argue that deaf students should go to special schools. However, it is necessary to consider that, in all practices that produce meanings, as well as the school, there are power relations, to define who is included and who is excluded. The school can be the considered as the most strongly demarcated space for the inclusion or exclusion of the deaf student. According to Luna (2017), some factors should be considered to provide the development of talents of learners in regular education, through the teaching practice in everyday classrooms. In this sense, it is possible to discriminate two realities, the first being that of the traditional excluding teacher and, the second, that of the innovative teacher. The following characteristics determine these two styles:

## *The importance of the environment in everyday school life: working with deaf students using active methodologies*

a) Traditional Teacher: teaching focused on the reproduction of knowledge; education focused on not thinking; information ready to be assimilated and reproduced; education focused on the past; mastery of facts already known; restriction or inexistence of the spaces reserved for creation; emphasis on reduced cognitive skills and inhibition of other skills; focus on inability and clumsiness; and ignorance of oneself, of one's own potential.

b) Innovative Teacher: teaching focused on the production of ideas and knowledge; education focused on teaching to think; effective confrontation of the challenges and problems of the 21st century; teaching focused on exploration, discovery, creative thinking, fantasy, imagination, idea games; positive attitudes in relation to skills, potentialities; stimulus to self-knowledge through the discovery of one's own creative potential.

Interview- Question 14: Does the Specialized Educational Service in Libras provide the conceptual basis of this language? Firstly, sign language is presented in a different modality from oral languages; they are spatial-visual, that is, the realization of these languages is not established through the oral-auditory channels, but through vision and the use of space. In fact, the educational attitude towards sign languages interfered in the historical process of deaf communities. The fact of "allowing" deaf people to use their spatial-visual languages caused profound changes in the lives of people who integrate such communities. As mentioned by the student LL5, Libras provides this basis at the time when there is an interpreter to conduct communication, this process starts to have a very important role in the educational process at the time when Sign Language starts to be respected as a language of the members of this social group.

Interview- Question 15: The teacher who teaches classes in Libras in your opinion should be qualified to perform the AEE? Yes, a competent teacher should: communicate fluently with deaf children; function as a linguistic role model for deaf children; have the ability to analyze and evaluate the sign language of deaf children and others. In addition, the teacher should have: knowledge of language variations and knowledge of how sign language is used in different situations and knowledge of deaf culture and history.

Interview - Question 16: How do you work in the classroom on the environment and active methodologies? According to LL5, it is important to offer an education that allows the integration and the full development of the deaf individual, for this, adaptations are needed so that we can perform the activities in the classroom, we can distinguish the colours and orders of each waste and how to dispose of it. There is not a specific methodology adopted by the school, but we strive to learn and adapt to this environment full of new expectations and teaching methods. What was exposed by the researcher demonstrates that there is an undeniable reality that must be addressed mainly in the social issue, because the deaf live in social and cultural environments that do not use Libras and thus have delayed language acquisition and all the difficulties accompanied by this specific issue, we emphasize that it is necessary to be made in practice all the approaches advocated by the policies laws and decrees, the deaf must have living with both deaf and hearing peers who know how to communicate in libras. But what has been experienced in the school environment is that despite the laws and policies aimed at inclusive education, there is a lack of support in relation to the inclusion of deaf people, lack of teachers and instructors of Pounds, lack of Pounds interpreters, lack of bilingual teachers, lack of school units prepared for the care of deaf students. The path to an inclusive education for the deaf is long, despite the advances, to achieve a bilingual education there are many barriers to be overcome. Based on the

***The importance of the environment in everyday school life: working with deaf students using active methodologies***

interview, it can be seen that before the intervention few 20% students knew how to safely explain what the environment is, and active methodologies, as shown in Figure 11.

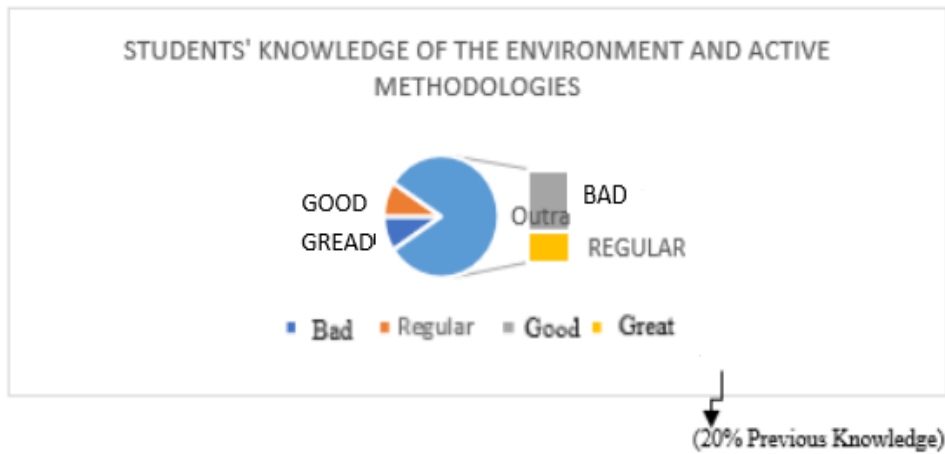


Figure -Graph 11 - Collaborative Learning before the intervention.

Source: Authors, (2022).

In collaborative learning it was possible to observe a partnership between students, a team collaborating with the other, aiming at a better understanding of all on the subject of recruitment and selection, students argued their experiences making a practical application of the theoretical content, getting more dynamic learning in agreement with Dias (2019), who demonstrates that in a collaborative learning is necessary to generate the climate of cooperation culminating in more efficient learning. With this methodological process the students obtained an experience in practice of how to perform this process, both with respect to posture, public speaking, reliability of information, in addition to technical knowledge about the content, considering that the evaluation process thus stimulates the potential of each one. In Graph 10 it is visible that 20% of those surveyed stated that the simulation of performance evaluations with the assistance and guidance of the teacher and the researcher contributed to prior knowledge of active methodologies. Students reported that the approach of prior knowledge acquired in the classroom through real experiences can promote cognitive development of learners, and are considered in the praxis of the educator, so the learner can get a better perception of the reality of active methodologies, and that is exactly what the approach should provide. These aspects addressed in the chart in Figure 12 motivate the student and reaffirms the classroom as an environment conducive to the construction of knowledge. The teacher needs to use creativity to make the lesson moment more motivating, using structured and unstructured materials, which aim to make students more active in the process. After the studies and methods applied this index rose to 80% proving once again that many students observed the content taught during the implementation of this project.

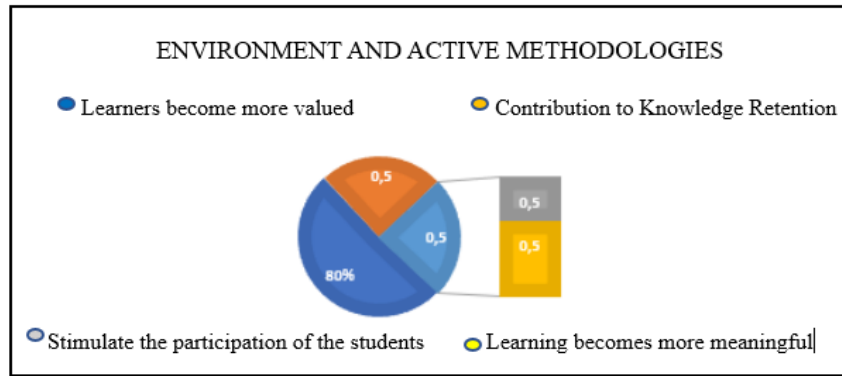


Figure 12 - Chart: Perception of the Students in the Use of Active Methodologies after the Intervention.

Source: Authors, (2022).

Still on the analysis of the perception of students about the active teaching-learning methodologies worked in the classroom, in graph 4 it can be observed that 80% of students agree that the active methodologies contribute to a more dynamic learning in agreement with Saviczki (2019), when the student plays an active role in the classroom learning becomes more meaningful. According to the survey, 80% believe that active methodologies encourage the participation of students in the classroom, and this contributes to the development of skills and abilities. Also 0.5% agree that active methodologies contribute to the retention of knowledge and 80% of students who answered the questionnaire confirm that they feel more valued when the teacher works active teaching-learning methodologies in the classroom, given that this methodological process requires more time for preparation and planning of classes. Each subject taught was used methodological resources aimed at the consolidation of students' learning. About the content of recruitment and selection (attracting people), the students were asked to build a field research work, where the same with the materials already pre-elaborated by the teacher, set up a work made with pet bottles, plant seedlings, paintings in general. Such structured and unstructured materials were directly related to the content taught in the classroom, such as, for example, the type of approach that the school works, whether internal, external or mixed, how to give the waste selection, as well as the sources used in the recycling process, among other questions. After the results obtained by the students, they presented them in the classroom, using the available resources offered by the researcher.

## V. Conclusões

Considering the aspects proposed in the active methodologies, this study was developed with the main objective of evaluating the results obtained by the applicability of environmental issues in everyday school life, and the use of active methodologies, to propose a new method of study for the training of deaf students. Therefore, it was sought to: a) understand how the learning process develops in children in order to enhance cognitive development and the production of knowledge in education; b) analyze the effectiveness of the application of knowledge through active methodologies, about the environment in the school environment; c)

## ***The importance of the environment in everyday school life: working with deaf students using active methodologies***

demonstrate how the active methodologies can be a tool for environmental awareness and mitigation of damage caused by man, regarding the economic and social development, d) clarify what is the best way to work methodologies in training with deaf students. In this way, in the development of this study, it was possible to verify how much the identification process of the deaf students is still deficient in the school practices, being a reflection of the educators' lack of knowledge, not only about how to identify, but mainly about who they are, which development and learning characteristics these students have, as well as the necessary aspects for the development of the pedagogical work with these students. Answering the specific objectives it is possible to conclude that the teaching of Active Methodologies presents itself as the appropriate methodology for the most satisfactory development of deaf education, especially with regard to the cultural identification of the deaf. Throughout his school career, the deaf subject has encountered a series of difficulties that negatively influenced his student performance, difficulties arising from the hegemony of listeners who aimed to "normalize" deafness. Concomitantly, the diagnosis conducted in this study has proved to be an effective tool in identifying factors of non-compliance of school management, which enabled the preparation of a proposal applicable in the Augusto Carneiro dos Santos State School located in the city of Manaus-AM. The preservation of natural resources, the use of environmentally correct materials and inputs, the preservation of human health and the environment, it is also highlighted that the success in the development and maintenance of active methodologies, depends on the importance given by school management, as well as some key factors, such as environmental and cultural characteristics of each proposed method, and especially the teachers, who should be properly motivated and involved in the process, a premise that was met in this study. The main result was achieved through the action of updating and/or use and implementation of Active Methodologies was the result obtained of 80% of applicability with students of the 5th Elementary School, providing an important action to be highlighted by the ease of implementation and the immediate result is the change of routine of the use of recyclable materials in the school environment, with the dissemination and guidance on the unnecessary use of recyclable materials, a significant result was obtained.

## **VI. Acknowledgements**

To the Institute of Technology and Education Galileo from Amazonia (ITEGAM) and Postgraduate Master in Engineering, Process Management, Systems and Environmental (EPMSE/ITEGAM). Manaus – Amazonas, Brazil to finance and support the research.

## **VII. References**

Almeida, Shirlene Pereira et al. Cotidiano no ensino da música na educação básica: uma revisão do tema em artigos da revista da associação brasileira de educação musical– 1992 a 2014. 2015.

Araújo, Marcos Alexandre Costa de. *O ensino e a aprendizagem de cartografia, por meio das metodologias ativas, no âmbito do ensino fundamental II em Cruzeta/RN*. 2020. Trabalho de Conclusão de Curso. Universidade Federal do Rio Grande do Norte.

## ***The importance of the environment in everyday school life: working with deaf students using active methodologies***

- Assis, Sandra Maria de. *Uma abordagem formativa da avaliação diagnóstica em uma escola da rede jesuíta de educação*. 2020.
- Batista, Eraldo Carlos; De Matos, Luís Alberto Lourenço; NASCIMENTO, Alessandra Bertasi. *A entrevista como técnica de investigação na pesquisa qualitativa*. Revista Interdisciplinar Científica Aplicada, v. 11, n. 3, p. 23-38, 2017.
- Bossa, Nádía. *A psicopedagogia no Brasil*. Wak, 2020.
- Brito, Ana Paula Gonçalves; De Oliveira, Guilherme Saramago; DA SILVA, Brunna Alves. *A importância da pesquisa bibliográfica no desenvolvimento de pesquisas qualitativas na área de educação*. Cadernos da FUCAMP, v. 20, n. 44, 2021.
- Câmara, Leandro Calbente et al. *A invenção da educação dos surdos: escolarização e governo dos surdos na França de meados do século XVIII a meados do século XIX*. 2018.
- Carvalho, Luciana Carrion; Antunes, Helenise Sangoi. *Garimpendo obras: estado do conhecimento sobre formação permanente de professores, educação especial e docência inclusiva*. Research, Society and Development, v. 10, n. 2, p. e43810212843-e43810212843, 2021.
- Castro, J. E. *Água e democracia na América Latina*. Campinas Grande: EDUEPB, 2016.
- Da Rocha, Luiz Renato Martins et al. *A escrita numérica de pessoas com surdo cegueira*. Práxis educativa, v. 16, p. 1-11, 2021.
- De Sousa, Rosa Maria Antunes. *Alimentação, Compras públicas e Desenvolvimento sustentável: O Caso Das Escolas*. 2019. Tese de Doutorado. Universidade de Lisboa (Portugal).
- De Souza, Carlos Dornels Freire; Antonelli, Bruna Angela; de Oliveira, Denilson José. *Metodologias ativas de ensino aprendizagem na formação de profissionais da saúde doi*. Revista da Universidade Vale do Rio Verde, v. 14, n. 2, p. 659-677, 2016.
- Do Nascimento, Juliano Lemos; Feitosa, Raphael Alves. *Metodologias ativas, com foco nos processos de ensino e aprendizagem*. Research, Society and Development, v. 9, n. 9, p. e622997551-e622997551, 2020.
- Faleiro, Wender; Ribeiro, Geize Kelle Nunes. *Saberes e Práticas de Mestrandos em Educação do Sudeste Goiano sobre Meio Ambiente*. Revista Sergipana De Educação Ambiental, v. 7, n. 2, p. 1-15, 2020.

***The importance of the environment in everyday school life: working with deaf students using active methodologies***

- Farias, G. F.; Spanhol, F. J.; Sousa, M.V. *The use of LMS to support PBL practices: A systematic review*. Journal of Research & Method in Education, v. 6, p. 3, 2016.
- Junior, Osmar Dos Reis Antunes et al. *Os desafios do ensino inovador: a percepção de alunos de Farmácia em relação às metodologias ativas de aprendizagem*. Pesquisa e Debate em Educação, v. 11, n. 2, p. 1-e32950, 2021.
- Krzyszczak, Fabio Roberto. *As diferentes concepções de meio ambiente e suas visões*. Revista de Educação do IDEAU, v. 11, n. 23, p. 1-17, 2016.
- LACERDA, Cristina Broglia Feitosa de et al. *Histórias e memórias de lideranças surdas em Pernambuco*. 2018.
- Lüdke, Menga. *O professor e a pesquisa*. Papirus Editora, 2016.
- Martins, Ana Claudia et al. *Metodologias ativas no Curso de Licenciatura em Ciências Biológicas do Instituto Federal Goiano Campus Ceres*. 2019.
- Masetto, Marcos T. *Trilhas abertas na universidade: inovação curricular, práticas pedagógicas e formação de professores*. Summus Editorial, 2018.
- Mazucato, Thiago et al. *Metodologia da pesquisa e do trabalho científico*. Penápolis: Funep, 2018.
- Mikalixen, Patricia Machado. *A formação de professores da educação profissional da área de saúde mediada por metodologias ativas e tecnologias inovadoras*. 2020.
- Minayo, Maria Cecília de Souza; Deslandes, Suely Ferreira; Gomes Romeu (org). *Pesquisa social: teoria, método e criatividade*. 34.ed. Petrópolis: Vozes, 2016. Coleção Temas Sociais.
- Moda, Simone Cavalcante et al. *O ensino da ciência e a experiência visual do surdo: o uso da linguagem imagética no processo de aprendizagem de conceitos científicos*. 2017.
- Mota, Ana Rita; Da Rosa, Cleci Teresinha Werner. *Ensaio sobre metodologias ativas: reflexões e propostas*. Revista Espaço Pedagógico, v. 25, n. 2, p. 261-276, 2018.
- Normando, Tarcisio Serpa. **História ensinada, cultura e saberes escolares (Amazonas, 1930-1937)**. Paco Editorial, 2019.

***The importance of the environment in everyday school life: working with deaf students using active methodologies***

- Ody, Leandro Carlos et al. *A concepção de ciência e a formação docente em ciências naturais*. 2015.
- Paiva, Leonardo. *Meio Ambiente Sustentável e Mineração: A proteção ambiental frente os processos de mineração da corte interamericana de direitos humanos*. 2020.
- Paro, Vitor Henrique. **Diretor escolar: educador ou gerente**. Cortez Editora, 2015.
- Rocha, Vinícius. *Tipologias biofilicas na percepção ambiental de uma escola estadual do noroeste capixaba*. 2017.
- Santos, Cleibianne Rodrigues dos et al. *Política para uma educação bilíngue e inclusiva a alunos surdos no município de Quirinópolis (GO)*. 2019.
- Santos, Gabriella Cristina de França Silva. *O professor tradutor/intérprete de libras e o trabalho colaborativo com o professor regente no processo de ensino ao aluno surdo*. 2022. Dissertação de Mestrado. Universidade Federal do Rio Grande do Norte.
- Santos, Jacielle da Silva. *(Re) construção das práticas de letramento docente e implicações para o ensino de gêneros discursivos*. 2016.
- Severino, Antônio Joaquim. *Metodologia do trabalho científico*. 24. Ed. São Paulo: Cortez, 2016.
- Silva, Ana Maria da. *O ensino dos usos dos sinais de pontuação: um estudo de propostas metodológicas de professores de língua portuguesa do 6º ano do ensino fundamental*. 2019. Dissertação de Mestrado. Universidade Federal de Pernambuco.
- Silva, António Pedro Soares Antunes da. *Fatores que contribuem para a evolução das aprendizagens dos alunos: estudo de caso*. 2019. Tese de Doutorado.
- Silva, Francisca Jerusa Freitas da. *Educação inclusiva x educação exclusiva e a formação dos estudantes de licenciatura em química para atuação em salas de aula com surdos*. 2019.
- Silva, Jéssica Pimentel da. *As cantigas de roda como instrumento pedagógico em uma creche municipal em Cruz das Almas-BA*. 2019.
- Silva, Valquíria. *Preserve o meio ambiente com atividades lúdicas: desenvolvimento da consciência ambiental na educação infantil*. 2019.
- Silveira, Ana Lúcia Nobre da. *Educação e sustentabilidade*. 2018. Tese de Doutorado.



***The importance of the environment in everyday school life: working with deaf students using active methodologies***

Soares, Lorena dos Santos et al. *Análise das metodologias ativas nos cursos de graduação da área da saúde para o desenvolvimento de um ambiente virtual de aprendizagem*. 2017.

Souza, Mateus de Almeida de; Guedes, Marcos Henrique dos Santos. *Ensino de biologia em prisões no Distrito Federal: perspectivas docentes sobre seus desafios e potencialidades*. 2021.

Vale, Daniele Alves de Araújo. *A importância do meio ambiente dentro das escolas como função educacional*. 2020.

Zimmermann, Amanda; Martins, Gabriela Schmitt Prym; Da Rosa, Cleci Teresinha Werner. *Metacognição e o estudo de Língua Inglesa como língua adicional: uma revisão bibliográfica*. Revista Educar Mais, v. 4, n. 2, p. 338-355, 2020.