



Environmental Awareness Generated from Immersive Multisensory Virtual Spaces, A Reality in the Teaching Practice

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Summary

This article seeks to reflect on the importance of environmental awareness with a group of novice English teachers, emphasizing the need to immerse themselves in multisensory virtual environments with which to enrich their capacity for resilience, so that the virtual replicas where environmental problems are addressed, lead them to reflect and predict crisis situations related to the management of natural resources, thus seeking that school agents feel involved with the difficulties of the planet, leading them to propose different alternatives to overcome the environmental crisis existing in the world.

For the development of this research, the qualitative methodology was chosen, whose foundation allows the analysis and interpretation of the data collected, understanding holistically the environmental phenomenon studied.

It is concluded that the English teacher can lead actions that promote the care and defense of natural resources for the generations to come.

Keywords: environmental awareness, immersive multisensory virtual environment, natural resources care, novice English teacher.

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1. Introduction

The current school is becoming a fundamental space to promote awareness of environmental deterioration in the school context, since it is the children who must learn about the need to take care of the planet, preserve diversity and above all think about maintaining natural resources, so that future generations can enjoy them in the coming times.

Hence, it is essential, as emphasized by Estrada-Araoz, E. G., Gallegos Ramos, N. A., Paredes Valverde, Y., Quispe Herrera, R., & Mori Bazán, J. (2023) to develop different projects that stimulate the sensory capacity around issues such as recycling among others, and thus get the society to become promoters of the defense of natural resources, creating for example discussion and reflection groups that promote the empowerment of students with ecological issues, until they become guardian agents of environmental resources in the communities to which they belong.

In this vision, Jaimes, K. (2022) has proposed the creation of curricular spaces where these topics are discussed in virtual and physical spaces, considering not only the scientific view, but also involving social, ethical and multisensory elements, to become a virtual network that involves the very action of the subjects, accompanied by immersive experiences of multisensory development, proposing solutions to the lack of resources and the consequences that may have the lack of this kind of resources in the communities that are about to be born.

These virtual processes are expected to promote the configuration of meaning that examine and recreate the new society, within which it is recognized that it is not enough to have the existence of subjects such as biology, chemistry within the curriculum, or virtual reality, but on the contrary, multiple analytical and reflective propositional studies are needed around the creation of virtual or physical academic spaces, where projects are discussed and implemented to raise awareness, awareness and promote conservation, multiple analytical and reflective propositional studies are needed around the creation of virtual or physical academic spaces, where projects that raise awareness and promote environmental conservation from the school are discussed and implemented, Bozdemir Yüzbaşıoğlu, H. (2020) clarifies that these types of initiatives can be cascaded to homes and communities where students are immersed.

In this regard, it should be added that interdisciplinarity offers a valuable perspective in the treatment of environmental issues, Bozdemir Yüzbaşıoğlu, H. (2020) emphasize that is a conception that although in some cases is somewhat utopian, it is characterized by being divergent and pluralistic, allowing for the integration of different areas, where all environmental problems can be analyzed in a complex and effective way, providing a holistic understanding. With this idea, it is clear that sensory games are a tool that the teacher can use to be used in the contexts where the students live, thus reaching a more complete understanding of the difficulties that the planet is going through.

The dynamics of construction and interaction among the members of a community is expected to lead to the implementation of tools that promote a structure of thought, which, as warned by Fernández Rosas, M. M. (2023) is capable of generating an awareness of the management of environmental difficulties, climate change, and even pollution, which affects the world today, therefore, if the school has the inclusion of multi-sensory environments, it is achieved that these young people reflect and propose various options for solutions to the problems of environmental conservation.

This idea is used to emphasize the importance of the teacher in this new century, who according to Fernández Rosas, M. M. (2023) has among his many functions to face the issue of environmental management, with the purpose of preserving the existing natural assets, so that the English class, for example, is conducive to formulate ideas on the formation of principles that seek the responsible and conscious use of the natural environment, accompanied by the exploration of sensory stimulation, adopting a critical view that raises ideas, as emphasized by Bonisoli, L., & Román, Y. (2023), that stimulate the rational and adequate management of natural resources, which, as previously explained, is accompanied by the encounter of knowledge, to provide an integrating vision of environmental problems, that explores the themes of the use of natural resources, accompanied by an immersive virtual experience, reaching a futuristic perspective.

Now we turn to this topic to talk about the use of technology in the service of the conservation of natural resources, Candrianto, C., Aimon, H., & Sentosa, S. U. (2023) argue that no one is unaware that platforms allow the use of different applications that address the issue of the use of natural resources with a view to sustainability, monitoring and monitoring, & Sentosa, S. U. (2023) that it is not unknown to anyone that platforms allow the use of different applications, which address the issue of the use of natural resources with a view to sustainability, monitoring and interconnection of environmental problems, thus proposing the integration of technology with virtual reality, as proposed by Estrada-Araoz, E. G., Gallegos Ramos, N. A., Paredes Valverde, Y., Quispe Herrera, R., & Mori Bazán, J. (2023) thus adopting a global vision where the technological field allows identifying environmental problems, without taking into account borders and without losing sight of their impact on human beings in areas such as environmental biodiversity, ecosystems and their impact on the use that humans make of environmental resources, it is understood

why Djuric, D. (2022) proposes the possibility of proposing global alternatives on the issue of environmental conservation.

Admittedly then, as emphasized by Almond, R., & Petersen, T. (Eds). (2022) that issues such as climate change require constant concern from all members of society, in particular, the education sector needs to pay special attention to this issue because it has become a global challenge, in terms of gas emissions and the greenhouse effect, among others, situations that have affected almost the entire planet, therefore, the need has arisen to establish global commitments regarding the use of natural resources, most of which have been embodied in agreements that are globally recognized but not respected or fulfilled.

Add to these concerns, arguments such as the urgent need for biodiversity conservation, which, as stated by Esparza Regato, A. V., Peñafiel Palacios, A. J., & Leyva Vázquez, M. Y. (2022) its affectation in the ways of life of human beings has become an international difficulty, to the point of becoming a fundamental issue in the conservation of species and their living spaces, for the balance in the use and management of natural resources, the same happens with the ecological management of garbage, a fact that seeks to create international environmental conditions, which accompanied with the creation of virtual experiences, are recognized in the world agendas, as priority issues.

2. Literature review

The following are some theoretical references related to the topic discussed in this paper.

Advantages of promulgating environmental awareness in school

Now it is of interest to analyze from what has been said so far, which actions are promoters of environmental awareness, Sulisworo, D., Erviana, V. Y., Robiin, B., Sepriansyah, Y., & Soleh, A. (2022) agree that this issue is part of the concerns of today's society while recognizing the positive effects of multi-sensory environments, in these initiatives. Some arguments on this issue are now presented.

Benefits the environment

In this regard, there are many advantages offered by the implementation of sensory games whose theme revolves around axes such as the one discussed here, which along with interactive learning can create awareness of the effects of pollution generated by human action, as stated by Fernandez Rosas, M. M. (2023) seeks to ensure the protection of existing natural resources today, which will probably ensure sustainability of the current wealth of nature.

2. Avoid wastage of resources by promoting their proper

From these ideas it is evident the importance of environmental management awareness, which supported with some virtual experiences, tend to promote the reduction of consumerism and on the contrary, promote the reuse of products through recycling, Naranjo Luzuriaga, E., Salome Ortiz, M., Limaico Mina, J., & Vasquez Llerena, E. (2022) think that this type of initiatives can reduce waste and especially the pollution of rivers, where inorganic and chemical materials are deposited, & Vasquez Llerena, E. (2022) think that this type of initiatives can reduce waste and above all the pollution of rivers, where inorganic and chemical materials are deposited, so by implementing in the school the creation of virtual experiences, it is expected that students reflect on the proper use of natural resources.

3. Undertaking actions to mitigate climate change.

In addition to all that has been previously said, it is insisted on the need to know different alternatives regarding the management of natural resources, from which it is expected to assume a different attitude and action to the current one, in relation to the use of natural resources, making known habits that promote the use of renewable energies, away from the consumption of fossil materials that harm the environment, Dykinson, Shendell, D. G., Black, L. F., Way, Y., Aggarwal, J., Campbell, M. L. F., & Nguyen, K. T. (2023) shows that they are a current trend, so it is expected that the school promotes a different lifestyle, which, along with the experiences of the technological field, will lead to actions away from the use and waste of existing natural resources.

4. Promotion of sustainable economies

Before moving on, it is worth reflecting on the use of resources, especially non-renewable ones, a fact that would undoubtedly benefit society, especially if a rational use of the planet's goods is promoted, which, supported by multisensory technological resources, would probably reduce the risk of contracting respiratory diseases, cancer and other problems, Kousar, S., Afzal, M., Ahmed, F., & Bojnec, S. (2022) consider that its affectation is directly linked to the inadequate use of natural resources, thus, an effective alternative is related to the consumption of organic food, for being healthier and more environmentally friendly, interested in promoting the physical and mental well-being of human beings, based on the moderate use of natural resources.

5. Organization of communities assuming their environmental responsibility

Under this perspective, the role of students, parents, teachers and other members of the educational community is recognized, who through various groups and with the integration of virtual reality technologies, can become groups that defend the environment and its assets, proposing, for example, ways to protect local ecosystems, becoming vigilant entities of nature, promoting the restoration of natural elements, so that in the not too distant future, as postulated by Marchi, C., Pimentel, P., & Nascimento, M. (2022). become groups that originate practices of sustainable use of natural capitals, in such a way that, feeling involved in a collective action, they will recognize the value of their individual actions, because they would be constantly experimenting new ways of taking care of the planet.

6. Teaching and environmental education

With these previous ideas, it is clear that when communities feel committed to environmental issues, knowledge about the use of natural resources is strengthened, Paiva, L. E. B., Bandeira, E. L., Arruda, H. R. de, & Romero, C. B. A. (2020) state that a sustainable action could be adopted that stimulates the empowerment of the members of the population with environmental issues, so that they sponsor actions that cause the conservation of the environment, with a caring and guardian view of the planet, through the development of a critical, analytical and reasonable thinking, analytical and reasonable thinking that, together with the creation of virtual experiences, will open up the treatment of environmental issues in the school context and particularly in English classes, with the hope that the attitude of students in schools in relation to their interaction with nature, will be favorable by assuming a criterion of sustainability.

7. Biodiversity preservation

We begin by affirming that, when the issue of biodiversity conservation is considered as a fundamental principle within a group, it seeks to establish a balance in the ecosystems, especially in the environments that are close to the community, as Wang, H., & Mangmeechai, A. (2021) could consent to the establishment of chains of conscience, which support environmental actions for the preservation of ecosystems in the long term, provided, of course, that this issue is considered as an essential argument for human life and for the protection of species biodiversity, among others.

8. Promotion of environmental public policies

In order to bring about a socio-cultural transformation with respect to environmental management. It is necessary that society takes ownership of these issues, integrating technology and its virtual reality, with physical reality, in this regard, the UN (January 12,

2022) states that to achieve this, the support of the education sector is needed, as it is the entity that is able to promote and manage policies, whose fundamental purpose revolves around the protection of the environment, in such a way that there is a legal framework that promotes the conservation of resources, biodiversity and the care of ecosystems, in such a way that the sustainability of this type of policies is achieved in the long term, thus regulating the actions of social groups. Proposal to encourage environmental conservation promoted from the school context.

Talking about the use of natural resources involves planning actions that can be undertaken by any of the entities that make up the school, some of them will now be mentioned.

1 School recycling program

It is well understood how this initiative stimulates the dissemination of environmental awareness which, as expressed by Yu, J., Wu, Y., & Wang, J. (2022) sets in motion the implementation of sustainable practices in favor of environmental conservation, among the members of the school community, making for example campaigns about the importance of recycling, promoting the collection of lids, planting gardens, or creating artificial simulation environments through the implementation of sensory experiences that supported by technology stimulate the reduction of waste and waste, in turn seeking suitable places to deposit the different discarded elements, or through a process of separation of recycling of materials, which supports the proper management of waste.

For this type of activities to be sustainable, Castro, A., and Leal, D. (2023) propose to carry out actions aimed at organizing contests and challenges among the students of a school or educational institution, so that they creatively make proposals on the use of recyclable materials in an artistic way, organizing virtual interactive learning competitions, which raise awareness and stimulate the reuse of material that can be considered as waste, but with a different look, can have a different use.

Similarly, a cleaning day can be proposed, as suggested by Silvera, I., Guerra, S., and Olivo, J. (2022) where all members of the community, including parents, participate in various days of order and cleanliness within the institution, thus ensuring that common spaces are kept clean and tidy.

2. School gardens in the school context

It would seem that another initiative that according to Casa-Coila, M. D., Mamani-Jilaja, D., Cervantes-Alagón, S. L., Mamani-Vilca, P. S., Yana-Salluca, M., & Alanoca Gutiérrez, R. (2023) could work to stimulate the sensitivity of students and even parents to the effectiveness of agriculture, is related to the organization of school gardens, which accompanied with dynamic environments and with the integration of virtual technology, stimulate awareness of healthy eating, which promotes good health habits, and at the same time strengthens environmental awareness based on principles of biodiversity conservation, proper use of water and respect for nature. Therefore, these initiatives accompanied by teamwork through the organization of online events where users feel involved in environmental issues, will presumably allow the delegation of various responsibilities among the members of the educational communities, in relation to the care, management and conservation of school gardens, for example.

It is important that this type of initiatives are developed within the school, as suggested by Nurul H. S., & Ramadhan, M. F. (2021) in which it is explained how the garden is organized, that is to say that this topic could be part of the curriculum, which with a holistic vision from the point of view of science, mathematics, art, language (Spanish and English) and through the support provided by multisensory virtual reality could study the impact of the proper use of agriculture, adopting at the same time, investigative and practical actions, facing issues related to the care of the planet.

3. Energy saving project

At this point, Rius, J. B. (2022) outlines the need to organize projects among which are those that promote, for example, the use of natural light in classrooms, so that light is replaced by the use of natural resources that are more sustainable and environmentally friendly, added to this would require installing motion sensors in the different spaces of the school context, so that they turn on only when there are people there.

Therefore, as indicated by Jaimes, K. (2022) it is also quite favorable for this type of initiatives, the installation of solar panels in school contexts, which promote the use of clean energy while raising awareness among students about its operation and its benefits, especially economic, because, although the investment is large, its use is sustainable and responds to the proper management of natural resources.

4. Organization of campaigns to reduce waste

To understand and explain the socio-cultural transformations related to the appropriate use of natural resources with which it is possible to generate a new identity in the forms of construction of imaginaries different from the traditional ones regarding the construction, reception and dynamics of natural resource management, it is important to propose the promulgation of the change of responsible habits regarding the use of water, for example, as Pozo-Muñoz, M. P., Martín-Gámez, C., Velasco-Martínez, L. C., & Tójar-Hurtado, J. C. (2023), could avoid the excessive use of water resources, Martín-Gámez, C., Velasco-Martínez, L. C., & Tójar-Hurtado, J. C. (2023) could avoid the excessive use of water resources, as well as with respect to waste management, in this way, it is intended that this type of actions and initiatives become part of the school culture and routine activities, which are handled within the school.

Then, it is sought that these practices of today's society accompanied with the implementation of multisectoral virtual realities raise solutions to environmental problems, coordinate their actions in actions accompanied by waste reduction campaigns, whose dimension seeks to minimize waste generation, in order to implement a sustainable management of resources, for this purpose, Candrianto, C., Aimon, H., & Sentosa, S. U. (2023) recommend conducting awareness campaigns among the members of an academic community through social networks, which with the help of multi-sensory environments awaken emotions and have a greater impact in relation to waste management and the importance of reducing and reusing all the elements that are part of nature.

5. Workshops and talks to raise awareness about the proper use of the environment in schools.

From the epistemological ruptures raised so far, where the complex fabric of subjectivities is evidenced, in which the subject that is part of a group, in this case the school, as Naranjo Luzuriaga, E., Pérez Mayorga, B., & Urrutia Guevara, J. (2022) needs to be aware of issues that concern today's society, such as pollution, climate change, the decrease of biodiversity and the risk that future generations may run, if we do not start to generate changes in our actions within the planet, hence the need to support initiatives concerning recycling, water and energy care, and waste reduction, which affect the sustainability of the environment.

In fact, it is necessary to organize online events where users feel involved with environmental issues, thus adopting new ways of seeing the world and of deconstructing and managing resources, promoting a different approach that allows school members to become empowered in their relationship with nature, so that they can have a sense of responsibility regarding the consumption of natural resources, always thinking about the new societies that are about to be created.

6. Ecological outings

The range of goods and services offers various resources and goods, which tend to be commoditized based on the criterion of use and consumption, facing this reality it is expected that students to come into contact with the natural environment, in a real or mediated way through sensory games or virtual interactive learning, as recommended by Almond, R., (Eds) (2022) make them aware of the importance of conserving natural resources, understanding the existing connection between human beings, the virtual world and the real context, and nature, thus providing a pedagogical experience that promotes the sustainable use of resources, motivating them to be proactive and resilient with initiatives that defend the sustainable use of natural resources, always thinking of future generations, assuming a responsible behavior in relation to the management of the environment.

Then, Fao, Unep, Who, & Woah (October 14, 2022) suggest that for example, excursions are made, outings to natural ecological trails are organized, ecological restoration projects are promoted, among others, in real or multi-sensory environments that arouse emotions and greater impact, so cleaning campaigns could be organized, for example of rivers, creating parks that allow the implementation of garbage collection and cleaning campaigns, which promote real actions that are born from the students, with which they observe, appreciate and value nature.

No less important is the preparation before the real or virtual multi-sensory outing, which should be accompanied by an awareness-raising crusade, so that this type of initiative has a greater impact, suggest Tobar, J. N., Navarrete, N. V., Pérez, A. V., Orellana, A. L., & de Dios Oyarz'un Morel, J. (2023) that end with a reflection, once the activity is finished, which leads to a process of awareness, regarding the actions that we humans who inhabit the planet should avoid.

7. Tree planting campaigns

It is now understood why Pacheco, A., and Hernández, R. (2019) are of the opinion that this initiative turns out to be quite effective, because when students perform different actions in the real or virtual multi-sensory world, it tends to environmental conservation with a greater commitment, based on a process of awareness when they come into contact with nature, in the same way, it is suggested for example that they become godparents of those plants or trees that they have planted through real or virtual experiences, to then carry out a real activity, where they become involved in activities related to water conservation and biodiversity, through initiatives that involve them directly or virtually, so that they become short and long term campaigns, where participants acquire various responsibilities that involve their actions, their parents, as well as all those who are part of their environment, who will have the opportunity to take ownership of their ecological actions, responsibly and in the long term.

8. Initiatives born from the students

Before moving on, it is vital to recognize that network connectivity enhances determinant actions in a society dominated by new forms of communication, where the interaction of subjects leads them to assume challenges and collective exercises Vieira, M. R., & Zanon, A. M. (2023) emphasize that this condition suggests the implementation of ideas that arise from the students' imaginaries, around issues related to environmental protection, as exposed by Khoiri, A., Sunarno, W., Sajidan, S., & Sukarman, S. (2021), in such a way that ideas arise about the importance of caring for nature, as a result of their participation, Sunarno, W., Sajidan, S., & Sukarman, S. (2021), in such a way that ideas arise about the importance of caring for nature, as a result of their participation, with multi-sensory and physical environments that arouse emotions and have a greater impact, with this, it is intended to create the need to avoid at all costs, the use of chemical elements that pollute and harm the environment.

9. Rational use of resources

As things stand, it is recognized that teachers have the opportunity to make students aware of the rational and responsible use of both energy and water at school, Pozo-Muñoz, M. P., Martín-Gámez, C., Velasco-Martínez, L. C., & Tójar-Hurtado, J. C. (2023) suggest that they could help to turn off the lights, use intelligent means to save water and light consumption when turning on the lights, use devices that promote water saving in the bathrooms, among others, in this way can become vigilant of the proper use of natural resources within the school context, such action is an added value that invites to organize campaigns to activate the use of sustainable transport, for example, then, it is suggested at the same time, that students in the school context use means of transportation such as bicycles, walking, or carpooling, engaging in experiences of virtual environments practicing multi-sensory games, with which the use of more environmentally friendly means of mobility is promoted, while encouraging the practice of a sport among them and / or among their families.

10. Use of sustainable educational resources

Before moving on, it should be noted that English teachers in their leadership role, as stated by Mendoza Lira, M., Collins Peña, F., & Rioja Falcone, S. (2022) are promoters of changes in the management of natural resources, with that all is expected to have awareness exercises against the unfavorable that is the use of paper, it would seem then that it is more appropriate, the use of digital materials as far as possible, using instead recyclable and biodegradable raw materials, when they need to develop activities within the school, which accompanied with creativity, it is expected to generate ideas that promote the proper management of natural resources.

Activities to promote proper environmental management in the English language area.

In the living conditions of today's world, Garay, J. P. P., D'íaz, M. A. A., Baca, L. S. R., & Mejía, V. L. V. (2022) are of the opinion that English teachers as subjects of action within society are called to assume an active role, with which it is possible to give a better management and use of natural resources within the context where they perform their pedagogical function, and it is precisely within their subject, where they have a space that allows them to generate an ecological awareness, which accompanied by multiple pedagogical strategies, can lead them to take as a flag the conservation of the environment, to achieve this, the development of some of the following initiatives is proposed:

1. Inclusion of environmental issues in the English classes

Among the amalgam of possibilities available to the English teacher, it is suggested the inclusion of environmental issues, through readings, writings, listening comprehension exercises, or with the implementation of virtual dynamic environments that expose it with experiences of recreation of reality, or through sensory games that promote interactive learning, so that being immersed in these experiences of technological field, topics such as climate change, recycling and diversity or conservation of renewable energy are addressed, Laso-Salvador, S., Marban-Prieto, J. M., & Ruiz-Pastrana, M. (2022) suggest that this would improve language skills and would also promote awareness regarding the management of environmental issues at the local and global level.

2. Implementation of workshops and debates in English on environmental issues.

Based on the statements previously referred to, Martínez, F. (2023) ratifies that the English teacher should be seen as a subject with a different conception of the ways of living, then the referents of resource management should revolve around the organization of projects, which with a collaborative strategy by the other actors of the school, consider and discuss environmental issues, taking an investigative look and incorporating some virtual environments that serve as sensory stimulation, to identify and propose solutions on environmental management, for this it is suggested that participants create posters, brochures, virtual videos and multi-sensory simulations and / or even assemblies or small representations where topics such as: deforestation, environmental pollution, as well as the use of recycling, tree planting, or garbage collection inside and outside the school.

3. Promotion of a blog or school newspaper in English where environmental ideas are posted.

There is a direct connection between the various real or virtual objects that are part of the school, and it is there where, as suggested by Loayza, J. L. (2022) it is necessary to create spaces that allow a dynamic connection mediated by the computer, in such a way that in a physical or virtual way a multisensory technological environment is created, which allows to generate discussions around environmental issues, to talk in the English language about the use of renewable energies, the effects of global warming, carbon reduction among others, thus promoting the use of language through the generation of virtual spaces, social networks, or videoconferencing platforms, which by their versatility allow communication, collaboration and connection mediated by technology and the use of the Internet.

4. To teach topics related to the appropriate use of natural resources.

It is clear that the English class space is conducive to generate a change in the teacher and the student, as suggested by Laso, S., Marbán, J., and Ruiz, M. (2022) in the treatment of environmental issues, hence the need to give way to the inclusion of topics about climate change, the use of renewable energy, endangered species, sources of environmental pollution, among others, so that such issues reinforce the teaching and learning of the language, as well as awareness of environmental issues, thus seeking to forge a different attitude, while using virtual realities on environmental problems, taking into account the survival of natural resources for future generations.

5. Writing letters or mailings in English about the proper use of natural resources.

These new forms of communication imposed in today's world have changed the ways of interaction and collaboration between the actors that are part of the school, consequently, as explained by Ramírez, G., Esteves, Z., and Chávez, C. (2023), when they suggest that the English teacher can have students write e-mails or letters to environmental organizations, where they express their concerns and worries about environmental difficulties, on issues related to pollution, the lack of care for current resources, The teacher can use writing in the foreign language as a pretext that provides the opportunity to exercise the leadership that characterizes teachers, to advocate for the proper use of natural resources on the planet.

6. Organization of events on environmental issues

This new environmental scenario where the constituent parts of the global context, as revealed by Padilla, E., and Flores, I. (2022) require a new organization and vision of the world, demand that physical or virtual spaces be created from the school that allow multi- sensory development to provoke an immersive experience, which organizes different events, whose main objective revolves around the proper use of natural resources, which it is suggested should be the product of community initiatives that are part of the school context, Therefore, the English teacher can organize online activities or events, whose theme revolves around Earth Day, where the topic of management and proper use of natural resources is discussed and analyzed in the foreign language, leading students to propose actions that lead to the prevention of waste of energy and other natural resources.

7. Use of materials dealing with environmental issues in the English language.

The use of real and virtual materials, as well as the use of didactic resources that deal with the topic of resource management, as referred to by Martínez, F. (2023) allows recreating, studying and visualizing the environmental impact, which can prevent disasters, if sustainable practices are implemented inside or outside the school context, then the use of recyclable material is formulated, which talks about the care of nature and which in turn allows learning the English language, to design innovative solutions, in which the main theme is the protection of nature.

3. Methodology

To develop this research, the qualitative method was taken into account, which according to Buitrago, Villalobos and Ramirez (2021) allow the assessment and understanding of the phenomenon discussed here, thus facilitating the approach to the environmental issue within

the spaces of teaching practice on behalf in this case of a group of future English teachers, considering the most important aspects of the topic discussed here.

Thus, we seek to study the issue of teaching environmental aspects within the practice of English in a public-school context, whose natural environment supports the analysis of the phenomenon studied, in order to subsequently study the findings in detail and in detail.

Data collection technique

For the phenomenon studied here, an interview will be applied whose conversation will be open and calm between the researcher and the participants. Cárdenas and Ramírez (2021) argue that with the use of this instrument an atmosphere is created within which it will be essential to understand the ways of implementing environmental care, looking at the degree to which the participants of the teaching practice give importance to the issue of conservation and care of the planet.

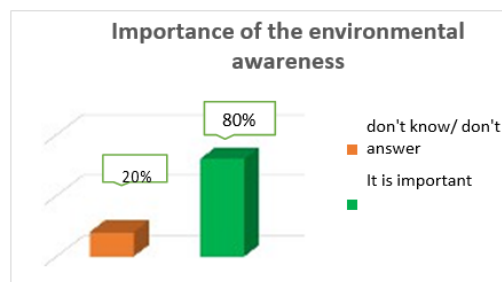
In fact, in order to analyze the data, an open and flexible vision is required, whose fundamental basis will be the interpretative analysis, which will allow organizing and categorizing the information collected, within which a study of the data collected will be made, then, a codification will be made, taking into account the common patterns of the answers found, taking into account the sources consulted, to then give way to the interpretation that the researchers make of the information collected.

Population

This research is made up of a group of 24 interns, whose ages range from 18 to 30 years old, who are currently immersed in the English degree program at a public university, it should be added that they are in their sixth semester of their formative cycle and although they have had a previous approach to the school, they are just beginning their immersion process within the educational context.

4. Results

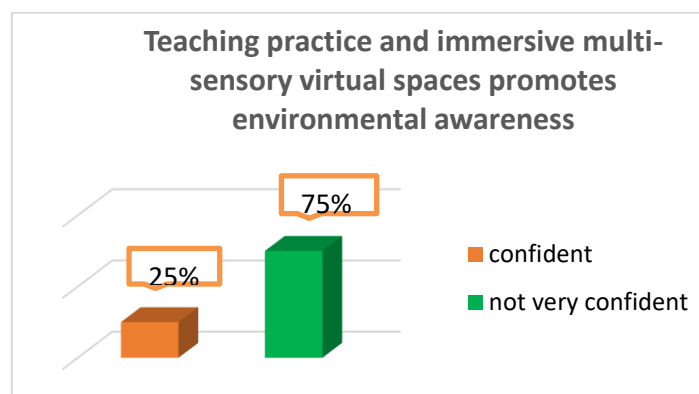
This section explains in detail the findings obtained based on the analysis of the data collected from the students of the teaching practice with children, who are currently immersed in a public institution, during one semester. Graph 1 shows the findings obtained in the question about the importance of environmental awareness.



According to the respondents, 80% of them consider that it is vital to prevent the conservation of species and their diversity, hence they consider that sustainable preservation should be promoted, within which they are very aware of the importance of caring for species, as well as for flora and fauna, as they are priority elements for the human species.

Note then that this result coincides with the view of Miranda (2017) who chains the attitude of human beings in relation to their interaction with the environment, which we can say, is mediated by the cognitive, affective and active processes of human beings, in this sense it is fundamental the role of the school and its actors, in the prevention of environmental pollution, degradation and decrease of natural resources caused by the waste sometimes caused by human beings.

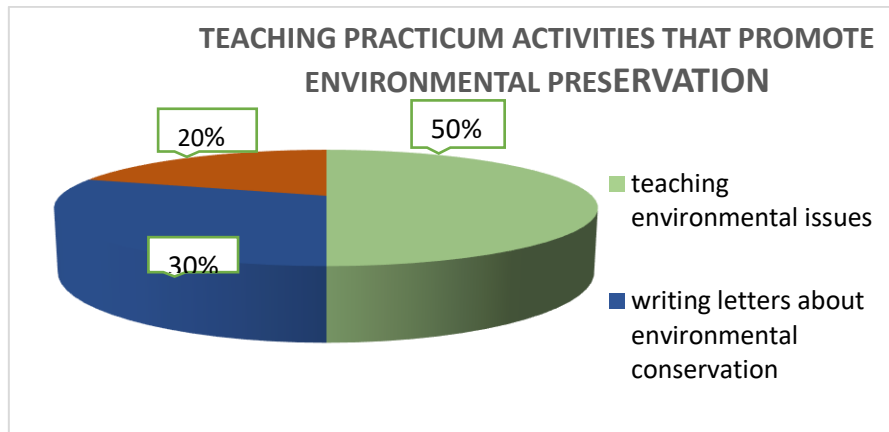
Graph 2 shows the interpretation of the teaching practice of an English teacher, seen as a space to promote environmental awareness. 75% of the respondents defined that it is necessary for the novice teacher to become a defender of the environment in order to avoid and prevent pollution.



Therefore, this vision coincides with Valencia Pérez, S. P. (2022) who emphasizes the need to promote the encounter of knowledge and practices in real environments that accompanied with virtual experiences, within which problems such as the degradation and decrease of natural resources due to multiple effects such as pollution and inadequate use of water are discussed, in a virtual learning environment for example, could be transferred to the real world of the student's life, or to his family context and his daily reality, thus becoming a reproducer and an advocate of these principles, which prevent the inadequate management of

natural resources, always thinking of future generations, considering the cascade effect to disseminate actions of individual and group impact that goes beyond their social circle, in relation to the phenomenon of environmental conservation, so that. The whole community will feel responsible for its effects, if they do not take ownership of their role as defenders of the environment.

In the third question, we inquired about the most effective actions to prevent environmental conservation, noting that 50% of them determined that the inclusion of environmental issues in the classroom teaching practice was more effective than the writing of letters on environmental preservation, which obtained 30%.



It can now be said then, that from these results it can be deduced that in both suggestions the exercise of writing in the foreign language predominates, considered as a facilitating tool for the generation of awareness of the need to make appropriate use of existing natural resources, with the intention of being thought of for future generations.

5. Conclusions

The issue of environmental awareness arouses a high degree of interest and concern in today's society. In particular, it is evident that the school plays a fundamental role in issues related to climate change, biodiversity, pollution, and therefore recognizes its great influence on changes in the treatment of the planet by those who make up the educational community. Therefore, the ways in which human beings act in the world continue to be a challenge, which is why it is necessary to seek solutions that are beneficial and sustainable for the preservation of the environment for future generations.

The teacher in particular has the opportunity to act on issues related to for example global warming, loss of biodiversity, restoration of ecosystems, the availability of natural resources on the planet, against which proposals are cited that allow a dialogue with virtual and real reality that analyze through virtual replicas environmental problems in order to reflect and prevent environmental disasters in the future, in this way it is expected that issues such as water use, new forms of energy, The virtual experience is expected to become important topics to be addressed through various activities developed in multi-sensory environments that awaken emotions and stimulate the virtual experience in such a way that when transferred to the real context of the English teaching practice, the foreign language would be learned and in turn would strengthen awareness of the management of rich natural resources leading to decision making in the contexts within which the educational community develops, inside or outside the school.

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