ORIGINAL ARTICLE

Education on environmental care in child development space

Educación sobre cuidados del medio ambiente en el Espacio del Desarrollo Infantil

Tekombo'e tekoháre ñeñangareko mitãreko jeguerojerahápe

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ABSTRACT

In Vygotsky's social constructivist model, he emphasizes that each person develops his or her learning through meaningful social relationships, and within this model the significance is given by the teacher, who is responsible for transmitting the content of knowledge that favors the social-cultural development of the child's environment, which includes the use of language, beliefs and skills that refer to the management of the environment, through the care of plants and knowledge of their parts (color, shape, size, texture, care). Methodology: observational study, non-experimental, qualitative-quantitative approach, to identify the knowledge of the physical parts of plants (color, shape, size, texture, care) and their care by the children of the Kunu'u- UNA Child Development Space, period 2024. Conclusions: Of the 30 seedlings grown and cared for by the children and kindergartners, all of them are alive and growing, although some show more growth than others. The use of recyclable pots, from plastic bottles, allowed the children to customize their own seedlings, giving an added value to the creative activity of the children who participated joyfully coloring with personal designs each pot in their care.

Key Words: learning - meaningful social relationships - care for the environment

RESUMEN

En el modelo constructivista social de Vygotsky, enfatiza que cada persona desarrolla su aprendizaje por medio de las relaciones sociales significativas, y dentro del mismo la significancia lo conceden el docente, responsable de trasmitir el contenido de conocimientos, que favorecen el desarrollo socialcultural del entorno del niño, que incluye el manejo del lenguaje, las creencias y las habilidades, que hacen referencia al manejo del medio ambiente, a través del cuidado de las plantas y de conocer sus partes (color, forma, tamaño, textura, cuidados). Metodología: estudio observacional, no experimental, enfoque cuali cuantitativo, para identificar el conocimiento de las partes físicas de las plantas (color, forma, tamaño, textura, cuidados) y sus cuidados por los niños del Espacio de Desarrollo Infantil Kunu'u- UNA, periodo 2024. Conclusiones: De los 30 plantines cultivados y cuidados por los niños y parvularias, se encuentran vivos y en franco crecimiento el total de los mismos, aunque algunos presentan mayor crecimiento que otros. El uso de

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Conflict of interest

The authors declares that there is no conflict of interest.

Funding

Was developed with resources from the autors

History

Received: 14/11/2024 Accepted: 19/02/2025

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macetas reciclables, a partir de botellas de plástico, permitió a los niños personalizar sus propios plantines, otorgando un valor agregado a la actividad creativa de los niños quienes participaron gozosos coloreando con diseños personales cada maceta a su cuidado

PALABRAS CLAVE: APRENDIZAJE - RELACIONES SOCIALES SIGNIFICATIVAS - CUIDADOS DEL MEDIO AMBIENTE

HAIPAVY

Vygotsky rembiapokatýpe constructivista social reheguápe, oikuaukave pe ava peteïteïva oguerojeraha ikuaapyhy hekoñemoirükatu rupive, ha péva ryepýpe mbo'ehára omohesakãporãkatueteva'erã umi mba'ekuaa, oipotyvõva ava'atyreko guerojera mitã rekohajerépegua,ogueroikéva ñe'ẽkuaapuru, jeroviakatu ha katupyrykuéra,oñe'ẽva mba'eicha oñemboguatava'erã tekoha ñangarekorã, umi ka'avore ñeñangareko ha ojeikuaakévo mba'épa oguereko(sa'y, ysaja,tuichakue, pire,ñangareko). Taperekokuaaty:aporeko jesarekóva,andu'aporeko'ỹva, teko-papygua,ohechakuaa hagua ka'avo rehegua(sa'y, ysaja,tuichakue, pire,ñangareko) ha mitãnguéra mba'eicha tekoháre oñangareko Mitãreko jeguerojera kunu'ũ- UNA, 2024 arýpe. Mohu'ã: Umi mbohapypa yvyra ra'ýgui oñotỹ ha oñangarekóva hese umi mitã ha umi parvulariagua, oikove ha okakuaa oñeñoty'akue retakue, jepémo oñ okakuaapy'evéva ijapytepekuéra. Umi mba'eryru mba'ejepurukuaajeývagui iapopyre, liméta plástico- gui ijapopyréva, kóva rupive umi mitã petetĩva oguereko imba'eteéva ka'avo ra'y, omomba'éva mitãnguéra mba'eapokuaa vy'apópe ombosa'ỹ umi ka'avo ñeñotỹha oñangarekoha.

Ñe'e yta: kuaapyhy, hekoñemoirũkatúva, tekoháre ñeñangareko

Introduction

The role of the teacher in the Child Development Space (EDI), dependent on the General Directorate of University Extension of the National University of Asuncion, with a lot of wisdom called Kunu'u-UNA is mainly to generate significant learning in the children under their care as a contribution in the construction of knowledge, including emotional aspects with the care of the healthy, safe and welcoming environment that promotes the integral development of the same (National University of Asuncion, 2023).

As an area of initial level, it implements knowledge, potentiating in children and through them, in their parents, awareness for the care of the environment, in a procedural way, considering that this space is the first contact with formal education, and that most of them have little knowledge about this particular topic; for which the kindergartens by successive conceptual approaches guide them to understand the care of plants, that these are living beings, they are born, grow, reproduce and die; and therefore to take care of them continuously, favors the quality of the environment and that of people (Holguín, et al., sf).

The pedagogical activities in the EDI, to generate a classroom environment that invites everyone to observe, investigate, learn, build their learning, to encourage in children, from an early start, critical thinking, as well as curiosity, creativity, honesty, resilience, kindness, respect, among many other values (Ausubel et al., 1983).

Within these development processes, the kindergarten teachers in charge of the area promote education for the care and sustainability of the environment, considering that learning about the actions we perform have repercussions and that, to the extent that we protect our immediate environment, we can preserve and ensure a legacy of survival, related to the quality of air, water, food and quality of life, for future generations (Ruíz Cabezas & Pérez Barrios, 2014).

The objectives and learning activities that the teachers instilled include: learning about the physical part of plants (color, shape, size, texture, care) being the thematic axis: environmental education and care of plants, and transversally it is intended to encourage the cleaning of the environment and all that entails pruning, watering and picking up fallen leaves. It was also proposed as a final product that each child should plant a potted plant, collect seeds and carry out a small cleaning minga in the EDI park.

Methodology: observational study, non-experimental, quantitative quantitative approach, to identify the knowledge of the physical parts of plants (color, shape, size, texture, care) and their care by the children of the Kunu'u- UNA Child Development Space, period 2024.

DEVELOPMENT

In Vygotsky's social constructivist model cited by (Santrock, 2007), it is emphasized that each person develops his or her learning through meaningful social relationships, and within it the significance is given by the teacher. The teacher is responsible for transmitting the content of the knowledge that favors the social-cultural development of the child's environment, in this case, as a student, which includes the management of language, beliefs and skills, which in this process refer to the management of the environment, through the care of plants and knowing their parts (color, shape, size, texture, care).

The kindergarten teachers intervene with their knowledge in an intentional way in environmental education, to initiate the process of sensitization in children, which in the medium and long term will have a high impact on the care of the environment (International Congress on Education and Training on the Environment, 2017)...

The early inclusion of children in environmental education generates a greater receptivity that allows inferring in the application of the concept learned according to (Ausubel, Novak, & Hanesian, 1983) for the achievement of sustainable environmental actions in their daily realities with the use of their pre-knowledge, achieving the motivation and appropriation of this new knowledge on the care of their environmental surroundings.

This type of initiative, of inclusion of children in environmental care, makes possible the attitudinal changes required for sustainability that promote awareness related to arborization - reforestation with ludic-pedagogical actions for the care of the environment (Holguín, et al., sf).

It is true that the area of natural sciences develops these concepts in classes in the tertiary stage of the educational level, where children, according to Piaget's postulates, their efforts and cognitive adaptations have already achieved a balance of assimilation and accommodation, so that the concepts and significant learning about the environment are no longer a novelty that enable permanent motivations in them, which allow them to transform their environment and internalize the culture of environmental care, so that it is sustained throughout their lives (Piaget, 2024).

Piaget, considers that in childhood education plays a vital and active role in the development of intelligence, and that the child learns by actively doing and exploring; where intellectual development is centered on perception, adaptation and manipulation of the environment for learning, this is known mainly as the theory of the stages of development, where children gradually acquire knowledge, to use them in a sustained manner

throughout their lives.

Although for a long time, in Paraguay, we have not proposed activities that promote the care of the environment, currently the ecosystem is seriously altered, due to the neglect generated by considering ourselves a country rich in this area.

The environmental problem has become a global phenomenon, which causes great and serious damage to the entire population, so this educational call to promote a culture for the care of the environment within the EDI, through educational actions, is an impulse that should become a strategic ally for the development of environmental values and create an environmentally sustainable culture in children, so as to allow a friendly relationship between humans and nature, considering that those responsible for environmental degradation, with their harmful actions, are the people (Lopez & Palacios, 2020).

The purposes that are developed in the approach of the educational processes on environmental culture, intend to generate, in the children subject of the project, the adoption of educational competences of environmental care, that allow the enrichment of the environmental educational knowledge in a sustainable and sustainable way; so that they become protagonists in the management and conservation of natural resources present in the ecosystem and, at the same time, from their young age, assume the concepts that carelessness causes harmful environmental impacts at all levels; therefore, these educational processes where concepts are shared and environmental care is applied are fundamentally influential in the sustainability of our quality of life (Campoverde-Robledo & Soplapuco-Montalvo, 2022).

Integrate education on environmental care, incorporating the pedagogical praxis, in the interrelation of the child and his environment (man with the planet), within the paradigm of sustainability, linked to the process of environmental education that is oriented to the understanding and development of skills for the care of the environment, thus favoring the modification of the relationship of nature with the human being, putting main attention on models of sustainable development with a view to educational sustainability (Weber, Lindenmeyer, Liò, & Lapkin, 2021).

The pedagogical dimension that determines the competencies in terms of environmental culture, according to authors such as (Karpan, Chernikova, Motuz, Bratanich, & Lysokolenko, 2020), (Bello Benavides, Cruz Sánchez, Meira Cartea, & González Gaudiano, 2021) consider that the role of pedagogical practice for the development of an environmentally sustainable culture in educational institutions should begin in the first contact of the child with the

educational system, considering what is expressed by the Ecological theory of human development of Bronfenbrenner exposed by these authors.

Therefore, it is important that educational centers develop capacities and competencies, with ecological knowledge, applied with environmental values, since students, according to this theory, are placed at different levels where they acquire knowledge and become more aware of their right or wrong actions, which favor their personal development towards respect and care for the environment (Bronfenbrenner, 1987). This theory recognizes the development of human behavior and how it is built through early childhood education, which emphasizes learning about ecological concepts, with explanations on how different social groups influence the conservation and preservation of the environment for a healthy environment.

In other words, teachers in schools have the power to innovate and work with participatory methodologies, through environmental projects with technological support, to transform the coexistence of man with nature and make them sustainable and institutionalize them, seeking the development of sustainable quality education from early childhood (Campoverde-Robledo & Soplapuco-Montalvo, 2022).

For this experience, teachers have managed the acquisition of vegetable seedlings (green onions and lettuce), which were delivered for their appropriation and care to a total of 30 children who attend the EDI; these were planted in small recycled pots (made from plastic bottles), where they developed under the care of each of the children under the tutelage of teachers.

This experience of cultivating, caring for and keeping the plants alive has represented significant learning, promoted by the project, through the interactive methodology proposed by the various authors cited in this essay.

Conclusions

The teachers expressed their great satisfaction in the development of this experience, even though this was not a variable of the work; they also expressed that the children have shown a great sense of responsibility, taking their seedlings to take care of them at home on the days they do not attend the EDI.

It is important to mention that there has been a high attendance and a reduction of absences among the children, which cooperated in the germination and evolution of the cultivated vegetables.

Of the 30 seedlings grown and cared for by the children and nursery teachers, all of them are alive

and growing well, although some show more growth than others.

The use of recyclable pots, made from plastic bottles, allowed the children to personalize their seedlings with self-made paints, giving an added value to the creative activity of the children who joyfully participated by coloring each pot in their care with personal designs.

It is relevant to recognize that there are limitations emanating from the subject under study, but because of the future relevance of the learning that can be generated through the work, the findings constitute a baseline for future research in this space of child development, in order to suggest possible improvements for future research.

Finally, we believe that we have generated significant learning in the children who are in the EDI, and that they will maintain and use such learning throughout their lives.

ACKNOWLEDGMENTS

To the teachers-pre school teacher of EDI.

To the authorities of the DGEU - UNA.

To Prof. Dr. Miguela Hermosilla for her valuable motivation for the development of this work.

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