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Promoting the Role of Inclusive Higher Education. Where are we going with people with visual disabilities?

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Abstract

The pillars of Higher Education in Paraguay are combined with teaching, research and extension, in that constant framework of challenges, challenges and opportunities that invite us to be, learn and demonstrate knowledge through teaching. The arrival of the Pandemic (COVID 19), in order to continue with academic activities, the Polytechnic Faculty of the National University of Asunción (FPUNA) through the Department in charge of virtuality, has taken the reins by supporting teachers , students and officials to continue with the normal development of classes, from there arises the objective of: "Promote the inclusion of people with visual disabilities in Higher Education in order to collaborate with training, using tiflotechnology. ". For this purpose, an exploratory methodology was proposed that consisted of a virtual interview conducted with an expert in the area of Tiflotechnology and STEAM in order to publicize the particularities of acquiring tiflotechnology equipment and the necessary training. It is expected that the UNA can offer accessible courses for training aimed at the competencies significantly expressed by people with visual disabilities with the intention of pursuing a university degree.

KEYWORDS: SENSORY DISABILITY, INCLUSIVE EDUCATION, TIFLOTECHNOLOGY

Introduction

The surprise arrival of the Pandemic (COVID 19) has undoubtedly altered the educational system in Paraguay. The FPUNA, from the Department of EDUCA, has started training courses aimed at teachers and students using technological tools in order to continue with the academic activities of the institution. In this context, the interest arises in thinking about inclusive education using tiflotechnology, specifically aimed at people with visual disabilities, with the objective of: "Promoting the inclusion of people with visual disabilities in Higher Education in order to collaborate with training, using tiflotechnology."

In compliance with Law N°. 5136, Inclusive Education and in particular the FPUNA would activate protocol No. 21/24/18-00-2021. And, to the fourth Sustainable Development Goal (SDG) of the United Nations for the year 2030, which proposes quality, inclusive and equitable education for all people.

Theoretical Framework

According to the Pan American Health Organization (PAHO, 2022), worldwide, 1.3 billion people live with some form of visual impairment.

Paraguay has 22.1%, according to data extracted from the National Institute of Statistics (INE) in 2012, while the Vision Foundation has registered approximately 25,000 blind people as of 2021, people with blindness due to avoidable and treatable causes and they mention that 200,000 People suffer from low vision and urgently need refractions (Vision Foundation Newsletter 2021).

Regarding education, (UNESCO, 2008, p. 24) states "Inclusive and quality education is based on the right of all students to receive a quality education that satisfies their basic learning needs and enriches their lives"

Regarding typhlotechnology, Sevensson (1988) expressed more than twenty years ago the concern that the discussion about the possibilities and threats of technological advances excluded education, especially PDVs.

In the National Model for Evaluation and Accreditation of Higher Education, where the regulations related to inclusion in Higher Education are specified, some points related to the accreditation processes of the quality of existing careers in Para -cool. The National Agency for Evaluation and Accreditation of Higher Education (ANEAES, 2018).

STEAM education derives references such as STEM+A and STEAM + H, where STEM+A are considered the contributions of the Arts and STEAM + H of the humanities. In this context, the following is born: (i) Science, Technology, Engineering, Arts and Mathematics +i of inclusion, which represents a more approach in education that focuses mainly on integrating the already existing pillars accompanying traditional teaching and creating an inclusive and innovative environment (the author).

Educational inclusion is due to tolerance, respect, solidarity, acceptance of people, without making differences, without overprotecting or rejecting others for their characteristics, needs, interests and potentials, much less for their limitations; As Heward (1997) notes "(...) to survive, a social group must adapt and modify the environment in which it lives" (p. 62).

Innovation is the concept that is used specifically in the sense of new proposals, inventions, and their economic implementation (Muller T. 2009), thinking about technological tools.

Methods and Techniques

The design corresponds to an action, application and analytical research, from the experience in the use of the tiflotechnological tool with exploratory depth, the exploration phase has been defined as a period of informal and free research, in search of the understanding that It involves a qualitative nature from the point of view of the expert, the techniques correspond to documentary analysis using primary and secondary sources, the population was focused on an interview.

Results and Discussions

- Raise awareness in the institution
- Infrastructure adaptation
- Teacher-official training
- Monitoring and evaluation

Author's considerations

There are several tools to serve PDV, such as Word or PDF, access menu that has plain texts, audios, audiobooks, images with descriptive text, explanatory videos and printed texts in Braille format, technological availability, such as computers, tablets and cell phones that have screen readers installed such as JAWS, Daisy, Magic, digital magnifiers, Talkback, Voice Over.

Lines of research are outlined: Digital humanities; Learning methodologies; educational innovation; Quality and assessment in education; Social responsibility and inclusion; Strategic technology management; Technological ecosystems; Visual analytics; Web engineering and software architecture, promoting and accompanying equal opportunities by offering expectations in search of inclusive conquest.

Conclusion

Inclusion education will represent a real and simple transformation in the classrooms, spaces for communication through the exchange of knowledge, it will help the coexistence, collaboration, and cooperation of all students, being the protagonists of their own creations with their own satisfaction in the context of excellence. The aim is to develop and propose a tool for the construction and implementation of quality education that serves PDV, using tiflotechnology.

References

- Coronel Chavez, L.D. & Demattei L. T. (2019). Propuesta del Grupo de Investigación en Tecnología Aplicada y Educación (GITAE) - Dirección de Investigación y Postgrado FPUNA, Paraguay.
- Heward, W. (1997). Niños excepcionales. Una introducción a la educación especial. 5ta Ed.
- Ley Nº 2072/2003. Creación de la Agencia Nacional de Evaluación y Acreditación de la Educación Superior (ANEAES). [con fuerza de ley]. 13 de febrero de 2003
- MÜLLER-PROTHMANN, T. (2009). Innovationsmanagement. Strategien, Methoden und Werkzeuge für systematische Innovationsprozesse. Disponible en línea.
- Organización Mundial de la Salud. OMS (2018) Ceguera y discapacidad visual. Notas de prensa. [Disponible en línea]
- https://www.who.int/es/newsroom/fact-sheets/detail/blindnessand-visual-impairment
- Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura. UNESCO. (2008). Conferencia Internacional de Educación. Cuadragésima octava reunión. La educación inclusiva: el camino hacia el futuro. [Disponible en línea]
- http://www.ibe.unesco.org/fileadmin/user_upload/Policy_Dialogue/48th_ICE/General Presentation-48CIE-4__Spanish_.pdf
- Svensson, H. (1988). The Use of New Technologies in the Education of Blind Students Integrated into Ordinary Schools. Educational Media International, vol. 25, núm. 2, pp. 90-93.