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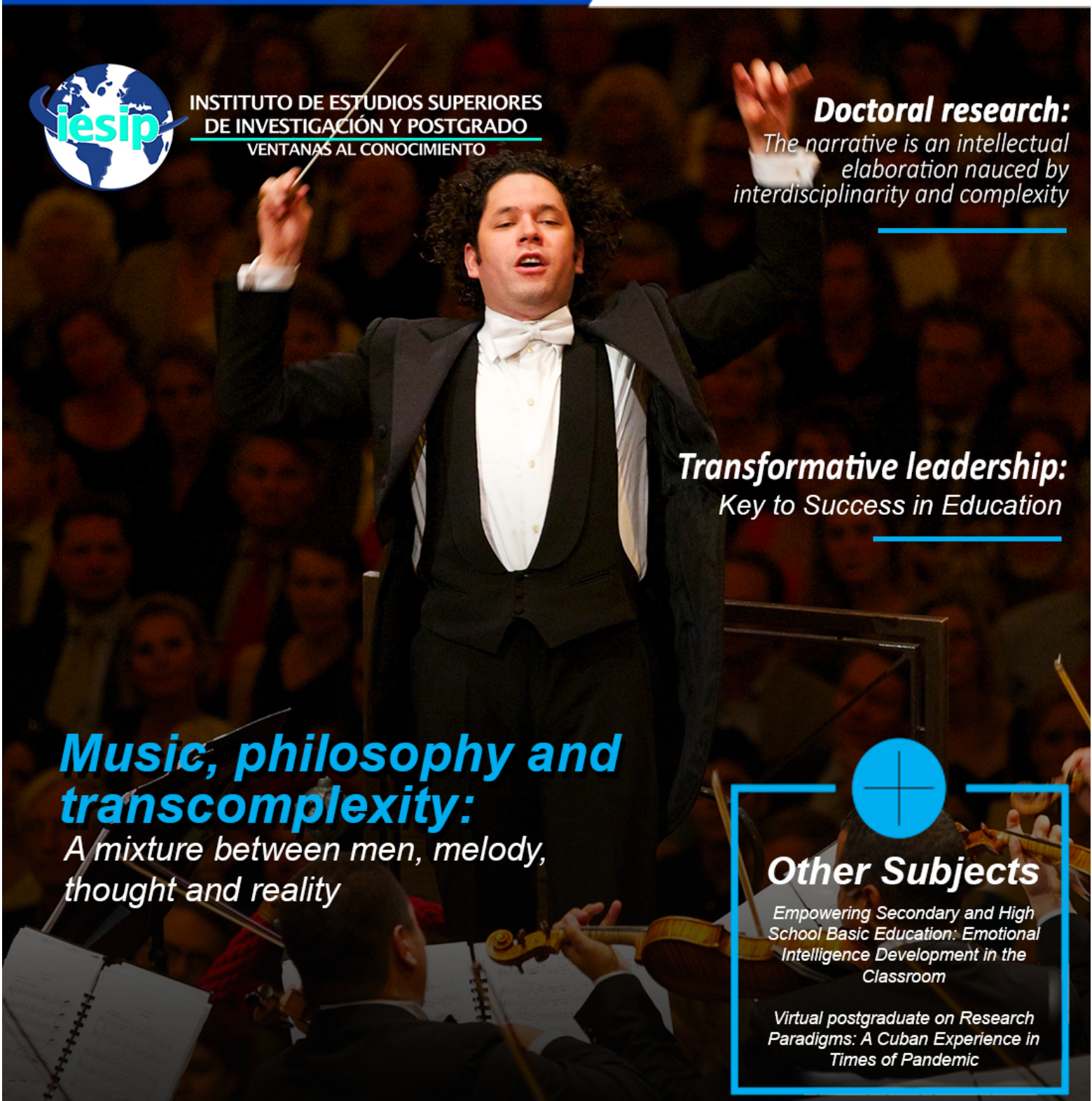

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VENTANAS AL CONOCIMIENTO

Doctoral research:
The narrative is an intellectual elaboration nauced by interdisciplinarity and complexity

Transformative leadership:
Key to Success in Education

Music, philosophy and transcomplexity:
A mixture between men, melody, thought and reality

Other Subjects

Empowering Secondary and High School Basic Education: Emotional Intelligence Development in the Classroom

Virtual postgraduate on Research Paradigms: A Cuban Experience in Times of Pandemic

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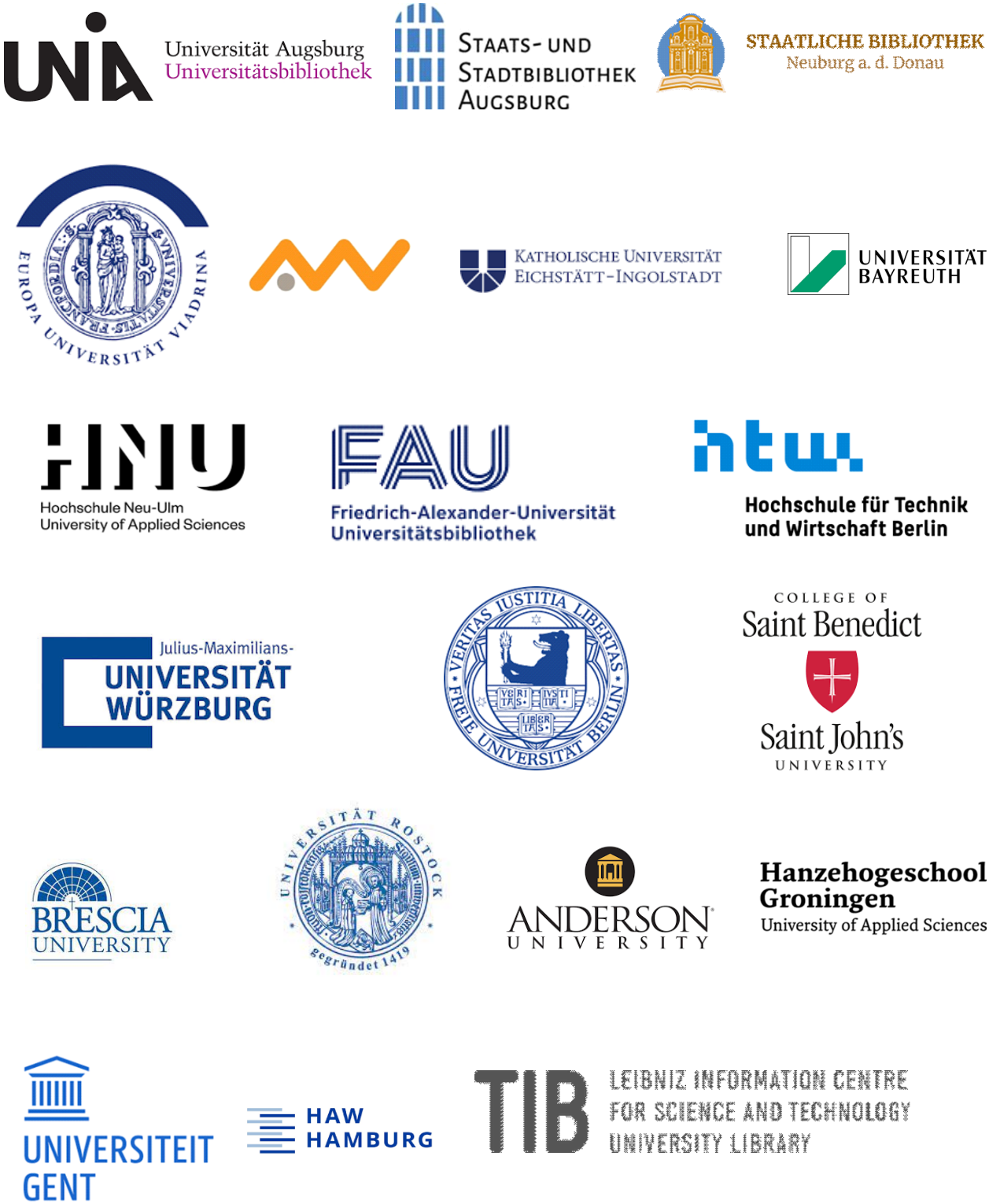


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Editorial

Transcending Borders: A Multidisciplinary Journey through Knowledge in REDIP

The beginning of a scientific journal represents an opportunity for an institution to transcend borders through the dissemination of knowledge. REDIP, born in 2019 with this purpose, has faced challenges on its journey, but collaborative efforts have paved the way to success. Continuous editorial improvement has been crucial in achieving international standards, and each published issue reflects the outcome of these efforts.

Our contributors are our greatest asset and a source of pride, enabling readers to find highly relevant information in the various articles and essays published. Diverse educational topics have been addressed, and the citation of our works in different publications highlights their contribution to the global scientific community.

The bonds forged from the beginning are strengthened in this issue, disseminating content in four languages (Spanish, English, Portuguese, and French) and expanding our reach to a larger audience. We hope our articles and essays continue to follow the path laid out, internalizing knowledge and eagerly anticipating new manuscripts from our readers and future collaborators for upcoming REDIP issues.

From the island of Cuba, Dr. Rosa and Dr. Dianelys present a work reflecting postgraduate experiences at the University Medical of Havana. Venturing into a virtual postgraduate design during the pandemic has been an enriching experience, prompting reflection on the new way of developing the educational process. This work offers readers a web of concepts and elements of interest, ready to be explored and reviewed at their convenience.

Dr. Savier shares with us his study titled "Emotional Intelligence of Teachers for Biology Learning in University Students." This research reveals relevant aspects that can serve as a theoretical reference for ongoing work. Savier's work stands as a valuable contribution to the field, providing insights that can enrich and guide future research.

In this series of works, Dr. Adrián Filiberto immerses us in an eloquent discourse that reveals new constructs to consider in the context of a doctoral thesis. He delves into a discursive universe ranging from disciplinary, interdisciplinary, and transdisciplinary to complex and transcomplex. Filiberto proposes the need for a hermeneutic turn in the discourse of a doctoral thesis, guided by a compass pointing to a specific point in the complex lexical of the communicative act, thus marking the path for the researcher.

From Colombia, specialists Sandra, Estela, and Edni guide us through educational participation, focusing on parents and the community, establishing an intrinsic connection with academic performance. An integral definition highlights the importance of family-school collaboration, exploring various forms of participation. The article delves into the fundamental role of educational participation, the factors influencing its success, and its impact on academic performance.

Similarly, Alix, César, and Nubia share their pedagogical experience in an article detailing strategies to cultivate emotional intelligence in the classroom, strengthening basic education. Emphasizing the fundamental role of teachers in the educational process, they highlight the need and responsibility of institutions and the state to provide continuous training programs for educators.

In an effort to enrich the content of this issue, Dr. Freddy and M.Sc. Jhon share their article on how transformational leadership in education is essential for management and educational impact, inspiring and motivating towards shared goals, promoting a positive environment. This approach stands out as determinant for academic success, redefining the educational role and creating an enriching environment. Thus, they invite us to explore and reflect on the relevance and transformative potential of leadership.

Also, in this issue, the work of M.Sc. Carlos, Katherine, and Edilsa can be found, where the reader will discover a scientifically inseparable perspective on the relationship between vocational guidance and multiple intelligences. The authors present an innovative approach that integrates vocational guidance with multiple intelligences theories, offering a comprehensive and enriching view for personal and professional development. We hope those who read this work enjoy the reading and find inspiration for their own professional growth!

Another valuable type of work in this issue is the essay by master's student Digna Julio, who, through a detailed analysis of the legal framework of the educational system in Venezuela, highlights the importance of the Constitution as the supreme norm and the Organic Law of Education. We hope this information is of great use in understanding the foundations and hierarchy of the legal framework governing the Venezuelan educational system.

Venezuelan Ph.D. student Yselia López presents a stimulating analysis of the debate surrounding educational praxis from the perspective of critical pedagogy and didactics. Her propositions emphasize the urgent need for a critical reflection on university teaching practices, aligning them with the vision, innovation, and solutions required to address contemporary educational challenges. Likewise, López defends a critical pedagogy that is participative, intercultural, pro-equality, equitable, and inclusive, grounded in critical theory, preparing students to face the challenges of today's society.

The essay by Ph.D. students Dustin and Zuly, titled "Continuous Teacher Training for Inclusive Education based on Competency Teaching," examines how contemporary society redefines education and continuous teacher training, emphasizing the importance of inclusion and competency-based methodology. The work highlights the need to train educators to promote inclusive education, proposing significant changes and high-quality strategies. Additionally, it underscores the close relationship between inclusive training and competency-based teaching, emphasizing profound changes and a commitment to educational excellence. This comprehensive approach aims to strengthen teaching and adapt to diverse perspectives and educational trends.

In the closing of this issue, Dr. Gregth Hernández guides us through an essay that explores Music, Philosophy, and Transcomplexity as an amalgamation between man, melody, thought, and reality. Highlighting the connection between music and thought, Hernández reflects on their function as forms of art seeking balance between science, art, logic, and emotion. He addresses the human need to maintain a comprehensive and transcendental vision, especially in the era of transcomplexity. The essay reveals how music acts as a precursor to transcomplexity, posing questions about its role as a transcomplex code and its intrinsic relationship with philosophy. It proposes a journey between music and philosophy as a means to overcome classical boundaries and build new representations in the re-signification of reality.

We hope the works comprising this issue are enjoyable for all our readers.

Ph. D. Omar Escalona Vivas

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Editorial

Trascendiendo Fronteras: Un Viaje Multidisciplinario a través del Conocimiento en REDIP

El inicio de una revista científica representa la oportunidad para que una institución trascienda fronteras mediante la difusión del conocimiento. REDIP, nacida en 2019 con este propósito, ha enfrentado desafíos en su trayecto, pero el esfuerzo colaborativo ha allanado el camino hacia el éxito. La constante mejora editorial ha sido crucial para alcanzar estándares internacionales, y cada número publicado refleja el fruto de estos esfuerzos.

Nuestros colaboradores son nuestro mayor valor y fuente de orgullo, permitiendo a los lectores encontrar información de gran relevancia en los diversos artículos y ensayos publicados. Se han abordado temáticas educativas diversas, y la citación de nuestros trabajos en diferentes publicaciones destaca su contribución a la comunidad científica global.

Los lazos forjados desde el inicio se fortalecen en el presente número, divulgando en cuatro idiomas (español, inglés, portugués y francés) y ampliando nuestro alcance a un mayor número de lectores. Esperamos que nuestros artículos y ensayos continúen siguiendo la senda trazada, internalizando conocimientos y anticipando con entusiasmo los nuevos manuscritos de nuestros lectores y futuros colaboradores para los próximos números de REDIP.

Desde la isla de Cuba, las doctoras Rosa y Dianelys presentan un trabajo que refleja las experiencias a nivel de postgrado en la Universidad Médica de La Habana. La incursión en un diseño virtual para postgrado durante la pandemia ha sido una experiencia enriquecedora, llevándonos a reflexionar sobre la nueva forma de desarrollar el proceso educativo. Este trabajo ofrece a los lectores un entramado de conceptos y elementos de interés, listos para ser explorados y revisados según la conveniencia del lector.

El Dr. Savier comparte con nosotros su estudio titulado "La inteligencia emocional de los docentes para el aprendizaje de la biología en los estudiantes universitarios". Esta investigación revela aspectos relevantes que pueden servir como referencia teórica para trabajos en desarrollo en la actualidad. Un investigador siempre sigue las huellas que dejan otros colegas con sus contribuciones, y este trabajo de Savier se presenta como una valiosa contribución al campo, proporcionando insights que pueden enriquecer y orientar investigaciones futuras.

En esta serie de trabajos, el Dr. Adrián Filiberto nos sumerge en un discurso elocuente que revela nuevos constructos a tener en cuenta en el contexto de una tesis doctoral. Se introduce en un universo discursivo que abarca desde lo disciplinario, interdisciplinario y transdisciplinario hasta lo complejo y transcomplejo. Se plantea la necesidad de un giro hermenéutico en el discurso de una tesis doctoral, guiado por una brújula que señala un punto específico en el complejo lexical del acto comunicativo, marcando así el camino a seguir para el investigador.

Desde Colombia, las especialistas Sandra, Estela y Edni nos guían a través de la participación educativa, enfocándose en padres y comunidad, estableciendo una conexión intrínseca con el rendimiento escolar. Una definición integral que resalta la importancia de la colaboración familia-escuela, explorando diversas formas de participación. El artículo profundiza en el papel fundamental de la participación educativa y los factores que influyen en su éxito, así como su impacto en el rendimiento escolar.

Asimismo, Alix, César y Nubia comparten su experiencia pedagógica en un artículo que detalla estrategias para cultivar la inteligencia emocional en el aula, fortaleciendo la educación básica. Se destaca que el docente es fundamental en el proceso educativo y debe cuidar su desarrollo formativo. Además, se enfatiza la necesidad y responsabilidad de las instituciones y el Estado en proporcionar programas de formación continua

para el profesorado.

En la perspectiva de enriquecer el contenido del presente número el Dr. Freddy y el M. Sc. Jhon nos cuentan en su artículo que el liderazgo transformacional en la educación es esencial para la gestión y el impacto educativo porque inspira y motiva hacia metas compartidas, promoviendo un ambiente positivo. Este enfoque se destaca como determinante para el éxito académico, redefiniendo el papel educativo y creando un entorno enriquecedor; razón por la cual nos invitan a explorar y reflexionar sobre su relevancia y potencial transformador del liderazgo.

Igualmente, en este número se encuentra el trabajo de los M.Sc. Carlos, Katherine y Edilsa en donde el lector podrá encontrar una perspectiva científica inseparable sobre la relación entre orientación vocacional e inteligencias múltiples. Los autores del artículo presentan un enfoque innovador que integra la orientación vocacional con las teorías de las inteligencias múltiples, ofreciendo una visión integral y enriquecedora para el desarrollo personal y profesional. ¡Esperamos que quienes lean este trabajo lo disfruten de esta lectura y encuentren inspiración para su propio crecimiento profesional!

Otro tipo de trabajo valioso del número es el ensayo de la maestrante Digna Julio quien a través de un un análisis detallado del ordenamiento jurídico del sistema educativo en Venezuela, resalta la importancia de la Constitución como norma suprema y la Ley Orgánica de Educación. Esperamos que esta información sea de gran utilidad para comprender los fundamentos y la jerarquía del marco legal que rige el sistema educativo venezolano.

La estudiante de doctorado venezolana, Yselia López, presenta un estimulante análisis del debate en torno a la praxis educativa desde la perspectiva de la pedagogía y didáctica crítica. Sus planteamientos subrayan la imperante necesidad de una reflexión crítica sobre las prácticas docentes universitarias, alineándolas con la visión, innovación y soluciones requeridas para abordar los desafíos educativos contemporáneos. De la misma manera, desde su ensayo López defiende una pedagogía crítica que sea participativa, intercultural, pro-igual, equitativa e incluyente, fundamentada en la teoría crítica, y que prepare a los estudiantes para afrontar los retos de la sociedad actual.

El ensayo de los estudiantes de doctorado Dustin y Zuly titulado "Formación Permanente del Docente para la Inclusión Educativa basada en la Enseñanza por Competencia" examina cómo la sociedad contemporánea redefine la educación y la formación continua de docentes, subrayando la importancia de la inclusión y la metodología basada en competencias. El trabajo destaca la necesidad de capacitar a los educadores para impulsar una educación inclusiva, proponiendo cambios significativos y estrategias de alta calidad. Además, resalta la estrecha relación entre la formación inclusiva y la enseñanza basada en competencias, enfatizando cambios profundos y un compromiso con la excelencia educativa. Este enfoque integral busca fortalecer la enseñanza y adaptarse a diversas perspectivas y tendencias educativas.

En el cierre de este número, el Dr. Gregth Hernández nos guía a través de un ensayo que explora la Música, filosofía y transcomplejidad como una amalgama entre el hombre, la melodía, el pensamiento y la realidad. Destacando la conexión entre música y pensamiento, Hernández reflexiona sobre su función como formas de arte que buscan equilibrio entre ciencia, arte, lógica y emoción. Aborda la necesidad humana de mantener una visión integral y trascendental, especialmente en la era de la transcomplejidad. El ensayo revela cómo la música actúa como precursora de la transcomplejidad, planteando preguntas sobre su papel como código transcomplejo y su relación intrínseca con la filosofía. Propone un recorrido entre música y filosofía como medio para superar fronteras clásicas y construir nuevas representaciones en la resignificación de la realidad.

Esperamos los trabajos que conforman el presente número sean del agrado de todos nuestros lectores

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Content

Research Articles

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Virtual Postgraduate on Research Paradigms: a cuban experience in times of pandemic

Postgrado virtual sobre paradigmas de investigación: una experiencia cubana en tiempos de pandemia

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Abstract

The article aims to assess the relevance of the postgraduate course on research paradigms in times of Covid 19, carried out at the Medical University of Havana between May-July 2021. From a qualitative approach, the emergencies that led to the design of the postgraduate course were systematized. from virtuality. The interweaving of positions and approaches of numerous authors about the events related to the aforementioned disease is addressed, as well as the awareness of the need to rethink the research paradigms in the face of the global health emergency. The validity of the experience allows its continuity and improvement.

Keywords: research paradigms, science, education, virtuality, pandemic.

Resumen

El artículo se propone valorar la pertinencia del postgrado sobre paradigmas de investigación en tiempos de la Covid 19, realizado en la Universidad Médica de la Habana entre mayo-julio del 2021. Desde un enfoque metodológico cualitativo, se sistematizaron las urgencias que conllevaron al diseño del postgrado desde la virtualidad. Se aborda el entretejido de posiciones y enfoques de numerosos(as) autores(as) acerca de los acontecimientos vinculados a la mencionada enfermedad, así como la toma de conciencia sobre la necesidad de repensar los paradigmas investigativos ante la emergencia sanitaria global. La validez de la experiencia permite su continuidad y mejoramiento.

Palabras clave: paradigmas de investigación, ciencia, educación de postgrado, virtualidad, pandemia.

Introduction

A coronavirus called SARS-CoV-2, of beautiful and extravagant appearance, burst onto the scene in 2020 to steal the spotlight of planetary life. As if all the problems of the globalized world were summed up in it (Medina, 2021a). In the opinion of Maldonado (2021a), the pandemic crisis once again made it evident that there are unforeseen phenomena in health matters, and these cannot and should not be neglected. Covid-19 took everyone by surprise; not even the best scientists in the world saw it coming. Neither were there, at first, vaccines or definitive solutions for the global health crisis that had occurred.

Such events once again put at the center of debates the issue related to the validity of scientific paradigms. This matter is of vital importance for research (in the search for drugs and technologies for the treatment of symptoms and sequelae of the disease). By then, the debate on paradigms permeated all spheres of social life, particularly education (in its pedagogical and didactic dimensions).

There were many questions in a short time: How prepared were we, the medical university teachers, to understand the pandemic crisis from the sciences? How to prepare ourselves in record

time to research and publish from the respective areas of knowledge? How to assume the impacts generated and continue the formative processes from virtuality?

The article presents the proposal for a virtual postgraduate course on the need to *rethink research paradigms in the face of new emerging realities* resulting from the Covid-19 pandemic. An evaluative analysis is made of the technological supports available for its teaching, the contents addressed, the main didactic and scientific proposals made by the participating teachers in its first edition. A final feedback is provided. The experience took place at the University of Medical Sciences of Havana (UCMH), in its Faculty of Health Technology (FATESA).

Cuban medical education occupies a leading place in the Latin American continent as it trains Cuban professionals and those of other nationalities to practice social medicine, through training in various higher health technicians and more than ten university degrees (medicine, stomatology, nursing, physical therapy and rehabilitation, hygiene and epidemiology, health information systems, among others).

Cuban medical education is recognized for applying the guiding principle of *education in work and for work*, during the student stage, and with the provision of health services within Cuba and internationally. Due to the variety of specialties offered, it is institutionalized in 13 faculties, and the teaching staff is in turn very heterogeneous in terms of specialties and academic training.

It is important to highlight that at the time of delivering the postgraduate course, the teachers were with the students, conducting active searches for the prevention and detection of Covid-19 cases and teaching virtual classes. The times and spaces, the formats and dynamics, the domestic and the institutional, the data and experiences, the public and the private; all strained the field of medical education.

This particular labor characteristic influenced, along with technological limitations, the lack of informational literacy of part of the faculty (aged moreover) and the limited dissemination that could be done to postgraduate studies, so that only 12 of the 25 available places were covered.

From a qualitative point of view, it can be considered that the course's realization was optimal and enriching since the enrolled teachers, male and female, are all scientific leaders who have academic degrees of doctorate or master's. They also hold responsibilities such as: (a) head of the postgraduate department and methodologists of the same, (b) head of the English department for specific purposes, (c) teachers of the careers: health information systems, health rehabilitation, hygiene and epidemiology, and pharmacology.

The methodological design and pedagogical strategy for the postgraduate implementation began with an interdisciplinary effort to articulate problems studied by different areas of knowledge: research methodology, critical epidemiology, international health, and social problems of science and technology (PSCT).

Some features of virtuality at the University of Medical Sciences of Havana (UCMH) during the pandemic

The first reactions of Cuban university institutions to the sanitary measures dictated by international organizations and applied by the government, were not much different from those experienced in other latitudes and were, as expected, contingency. Rapid curricular adjustments were requested for virtual proposals, in order to take full advantage of the available technological support.

Amid such unprecedented circumstances, it was necessary to become more dynamically aware of the need to do science and rethink how to focus research in new contexts. Something that Puiggrós (2021) calls for when questioning teachers about the imperative to articulate new interweaving's and enunciations between the terms: contingency - experience - inheritance – creation, in current pedagogical and scientific debates.

As pointed out by Coicaud, Martinelli & Rozenhauz (2021), working in virtuality requires recurrent updating, demanding clear policies and decisions, because universities do not change without the commitment of teachers, nor these without the institutions. Their appropriation to transform teaching is a process that takes time. However, we believe that crises can generate and motivate growth opportunities both institutionally and personally. Goals that are prolonged over time sometimes dissolve, while they can gain strength and astonishing momentum in urgent moments.

Once the most critical stage of the pandemic has been "overcome," in times of recovery or presumably post-pandemic, it is imperative to systematize applied experiences to signify how much of what has been done acquires connotation to be normalized in pedagogical practices.

Both at the postgraduate and undergraduate levels, this jolt that we still live outlines the imperative not only to train in the subjects we teach but to seek dialogues of knowledge through interdisciplinary and even transdisciplinarity. On the other hand, to rid ourselves of the reproduction of information, boring classes, and innovate more effective methodologies but always connected with the purposes and the educational context in which we act. Publishing to interconnect also becomes an unpostponable habit.

Cuban medical education takes place in a country blocked by the US government for over 60 years. Simply put, this means being subject to a cluttered legal framework that has extraterritorial character and affects all of Cuba's economic and commercial relations on the international stage (which can be cataloged as the longest and most enduring economic war since the post-war period). The blockade also affects multidimensionality all social spheres (access to ICTs, in the ideological-cultural: feeling of a besieged square, among others).

The access of education in general, and medical education in particular, to the use of ICTs for educational purposes, is still limited. In the last five years, state investments have been made in the telecommunications branch, and capacity has been increased to provide services. Despite the efforts of the Cuban state to expand connectivity and computerization of Cuban society, it is still far

below what is aspired to and needed. In Cuba, connecting to the internet from mobile phones is still expensive, although with a sustained trend towards price reduction. Students and teachers have 2G, 3G or 4G depending on the availability of phones, which are mainly imported by travelers or relatives (sometimes used). The internal retail market for computer and mobile phone equipment is very limited.

Given this situation, it can be affirmed that, through face-to-face modality, it is unlikely to use the internet sustainably and in real-time in all the dozens of educational scenarios of medical education, as the university is located not only in the faculties but in numerous accredited formative spaces for it: hospitals, polyclinics, medical offices (among other health institutions).

For certain prioritized disciplines, the goal is to intentionally ensure such access through the distribution and use of the institutional technological base, with criteria of rationality and efficiency. In remote or virtual modalities, there is not, for the most part, an access option or the technological support to transmit - in real-time or synchronously - video conferences or online workshops; using ZOOM or other platforms. The asynchronous use of the Virtual Health Classroom (AVS) predominates, as part of the Virtual University of Health (UVS).

The UVS of Cuba was created in 2001 (Zacca, Diego & López, 2008), and its AVS is supported on the Moodle platform. The contingency arising from the epidemiological situation allowed its expansion and encouraged its use not only for postgraduate activities but also for undergraduate ones.

The didactic resources for the design and implementation of virtual courses are concentrated in the following didactic units: a general guiding guide for the course in question, with the design of activities to be developed by the students (both self-control and evaluative tasks to be delivered and their corresponding schedule) and the general available bibliography. Each topic includes a folder containing: a specific guiding guide, bibliography (both basic and supplementary); as well as the conferences (in PowerPoint or in PDF format).

A general course forum is usually designed, as well as evaluative or non-evaluative forums for each topic; that allow interaction (asynchronous) between teachers and students. The teachers, who are participating in virtual education for the first time, design the courses and simultaneously train in the mastery of the Moodle 3.0 platform. There are other available resources that are still pending use due to limited available technological capacity, and/or because they require continuous learning processes on the part of teachers and students.

Program designProgram design

The course on *rethinking research paradigms in the face of new realities* focuses on the logic of research (conceiving it as a higher moment in research methodology). In its program, it is clarified that it does not constitute a basic methodology course, as it is considered that the students have already overcome this level of preparation for research. It includes unusual critical exercises in

postgraduate health studies, referring to the approach of different research paradigms, current methodological debates; and the reconsideration in the face of the new circumstances that the world in general, and health processes, in particular, are experiencing in the current scenario.

It is conceived as a space for updating on new perspectives in health-related research. It also emphasizes that each student should exemplify, from their specialty and in dialogue with others, possible problems that can be researched with new interwoven perspectives by the participants.

The proposal for the postgraduate program is structured around three themes:

Theme 1, *Scientific Research and Paradigms*, consists of three lectures. In the first, rather than providing concepts, opinions of various authors are articulated about the main paradigms: a) positivist or quantum, b) qualitative, c) critical, and d) complexity. Among them are highlighted: Almeida (1992, 2007), Melero (2012), Colmenares (2012), Sequera (2014), Breilh (2015), Torres (2015), Maldonado (2016), Basile (2020). The main conclusion that is reached rests on the non-obligation to adopt a paradigm in an absolute way, but its use must respond to the research topic and the scientific problems to be solved, for which the understanding of the need for mixed methodologies is suggested (Muñoz, 2013; Núñez, 2017).

In the second and third conference of topic 1, we reflect upon the following axes of debate and authors:

- The relevance of Morin's idea (1984) about how the enormous mass of quantifiable and technically usable knowledge is nothing but poison if deprived of the liberating force of reflection.

- Science and the production of scientific knowledge are changing, and this shows that the identity crisis of contemporary science is a crisis of growth, a new mode of producing and legitimizing knowledge and technology (Morin & Delgado, 2017).

- The discovery of the essential components of a complex process doesn't arise from a simple accumulation of data. An excess of irrelevant and disconnected data often takes the form of ignorance. The search for essences is an act of intuition and creativity. The proposals that stem from this will be validated later (or not) by new concrete experiences (Lage, 2018).

- More often, natural sciences, engineering, social sciences, and humanities collaborate to address important complex problems (Estévez, 2019).

- The absence of a common language between "natural sciences" and "human sciences" makes it difficult to achieve internal coherence that would allow both to not mutually dismiss each other. The division between these disciplines isn't inherent to science itself or the humanities, but rather created by those who practice it (Zamora, 2019).

- Reinterpreting Kuhn (1971), it can be affirmed that scientists work based on models acquired through education and subsequent exposure in scientific literature, often without fully understanding or needing to understand the characteristics that have granted these models their paradigm status in the community. This could explain the non-obligatory nature of routinely following all procedures of each paradigm, and furthermore, the coherence displayed by the research tradition they participate in might not even imply the existence of a basic set of inviolable rules (Medina, 2021a).

- Constant return to research praxis is necessary because the role of the human component is decisive. The need for scientific leadership, researcher motivation, and commitment are essential. Without these, no possible change or adoption of new paradigms can occur, which ultimately materialize into modes of professional action (Medina, 2021a).

In Topic 2, *Scientific Research and Methodological Designs*, the relationships between methodological design and research logic are explained, seeking plural views on a subject in open discussion, but not for that reason avoidable. Among the main authors to be studied in Topic 2 are: Cascante (2011), Corona (2017), Piovani & Muñiz (2018), Cornejo & Rufer (2020).

In Conference 1 of Topic 2, in the face of so many definitions about science, it is summarized that it is an intentional activity structured to produce new, pertinent, and socially significant knowledge. The main focus is not on the methods or the instruments with which reality is explored, but on the logic with which it is conceived to approach the problem to be studied. Rather than talking about methodology, one should talk about the logic of research, as the design must function as a flexible, dynamic system; where all the components and parts of the process, and their results (presented in the final report) are interconnected horizontally. This should ensure clarity, articulation, and scientific solidity. The importance of the scientist's creativity and ability to formulate good questions is also emphasized, which can be learned through many hours of study and research with successive approximations of what has already been formulated. In addition, one must train in the exercise of choosing and evaluating.

Conference 2 of Topic 2 proposes to characterize the methodology of horizontality, as part of the emerging methodological approaches being developed in the world. It insists on banishing the fear of diversity in methods and techniques, as the traditional idea of seeing it as a weakness can be its distinctive quality. Such a stance contributes not only to dialogue among researchers but also to building encounters with all those involved in the problems being investigated. It also opens a door to discursive equity and the autonomy of plural voices, born from bringing together various disciplines embodied in groups that surpass interdisciplinary intentions and can define what must be built with knowledge (including non-academic knowledge).

In Conference 3 of the aforementioned topic, the idea is further deepened when the link between horizontality, mixed methods, and reflexivity is unfolded. Initially, a historical-logical approach is taken to three essential moments in the discursive construction of methodological debates: the quantitative consensus in social sciences of the first half of the 20th century, through

methodological triangulation and quanti-quali combinations (predominant since approximately the 1960s of the last century), to debates on triangulation and articulation of mixed methods (in the 1990s).

On the other hand, it is clarified that mixed design is not reduced to uniting the results obtained through dissimilar paths but requires integration at all stages of the research: (a) design, (b) material creation, (c) participant recruitment, (d) data collection, and (e) own analysis. Mixed methods are not inherently more or less valid than each specific research approach. Validity rests more on the suitability, comprehensiveness, and effectiveness with which these methods are applied. An open question for the next topic is what enigmas permeate the debates in pandemic times.

Topic 3. *Contexts and Dilemmas of Scientific Development in the World and Cuba, in Pandemic Times*; focuses its analysis on the multidimensional context of the global crisis in which the pandemic emerges, the impacts, and urgencies that this health catastrophe imposed on the field of health services and research, as well as medical training. It also accounts for the scientific advances experienced in the period. Among the authors dialoguing are: Maldonado (2021b), Martínez (2021), and Machado (2020).

The mentioned topic has 2 conferences and focuses its view (among others) on the following axes:

- The pandemic of the new coronavirus can be classified as unprecedented. It has generated a state of global alert (Breno & Geoffrey, 2020).
- The current emergency is not only a health crisis. It is what social sciences qualify as a total social fact, in the sense that it transforms the whole of social relations, and shocks the entirety of actors, institutions, and values (Ramonet, 2020).
- In its global reach, Covid-19 represents an unprecedented situation for the world. Diseases of the utmost severity, such as Ebola, did not receive as much global and media interest, as they were confined to a forgotten continent like Africa (Medina, 2021b).
- Intellectual, academic, and political debates oscillate between corona-optimism and corona-pessimism (De Sousa, 2020).
- The growth of open science networks, publications, research, and the record time achievement of vaccines to immunize against Sarcov-2 have been great feats. Meanwhile, the unequal distribution of vaccines, the commercialization of drugs, and the health policies of most governments, have evidenced inefficiencies (Basile and Feo, 2021).
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During the three topics, participants can contribute their experiences and opinions through three debate forums and a final integrative workshop; the most significant contributions are compiled below, as well as the criteria expressed in the feedback of the first edition carried out from May to July 2021.

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Experiences in postgraduate teaching

The first debate forum asked participants to respond to the following statement: Evaluate the importance of deepening your understanding of research paradigms for your training. We highlight some of the main ideas below:

- *I am very interested in the approach of studying various paradigms to update myself and write articles and papers for events, where not only numbers are handled but also experiences, narratives; which is not very common in medical sciences.*

- *The Health Information Systems (SIS) career has three profiles. In the first, related to statistical systems (SIE), statistics predominate, but in scientific information and health librarianship, qualitative assessments and criteria are essential. In Informatics, the combination of both paradigms would be exciting. This postgraduate opens new ways to work in our career.*

- *Mastery of research methodology is vital for efficient project development and publication. In the specialty of Hygiene and Epidemiology, quantitative paradigms have long predominated. But with this course and other knowledge, we are learning that, along with statistics, it is necessary to deepen the qualitative analysis of health processes. And we must move towards mastery of methods and techniques more tailored to complex dynamics like the pandemic.*

- *I consider the critical paradigm important in health and pedagogical sciences, considering that the critical approach is characterized not only by investigating, obtaining data, and understanding the reality in which the research is inserted but by provoking social transformations in the contexts in which it intervenes.*

In forum 2, it was asked: Illustrate the usefulness of horizontal methodology, and mixed methods, in your specific field of research:

- *I had never deeply questioned the importance of involving students in our research, from an active role. And understanding that horizontality can also be used in medical education research is a broad field for conducting research with new approaches. And I think all this also points to interdisciplinary between health sciences and social sciences, as these more qualitative methods have been developed from the field of the latter.*

- *Through the lectures on the second topic and consulting the book on Horizontal Research, we have learned that peer research allows the participants' perspective. Sometimes we apply surveys or other instruments, and we do not thoroughly prepare the subjects who participate, and they do not even understand well what the research is about.*

- *I find the use of methodology and mixed methods in the care area interesting, considering that one of their uses is research in health services, which aims to obtain valid and reliable information to make decisions on how to efficiently and acceptably organize health systems, with the main concern being the quality of care provided to the population.*

In forum 3, it was asked: What is the usefulness of reflexivity as an approach, for conducting research in your professional field?

- *Health rehabilitation is related to secondary prevention. It means that the sick individual is known, and new complications are prevented. Reflexivity is the action of problematizing the function of the researcher. In this case, the social conditions surrounding the individual and their lifestyle must also be considered to influence their recovery. The health conditions in which the patient is found are multifactorial, so they do not respond to a universal pattern; their identification must be individualized.*

- *Reflexivity is vital in database research and countless statistical processing through ICTs. Like the topics related to Cyber security, regulations and ethical norms in the use of information, and other phenomena transversed by social mechanisms such as the use of digital networks.*

- *The power of statistical data is overemphasized, both in health research and in educational research. In the latter, the individuality of the student is quite forgotten, and the results are overly standardized, considering that they can be mechanically applied to other contexts. I find this very useful, for example, for the subject Quality of Information, where the integrity, truthfulness, and traceability of health information must be assessed.*

- *The mixed approach and reflexivity in pharmacological studies offer advantages by having a variety of observations derived from different sources, types of data, and contexts. It produces richer information, allowing research to be more interpretive concerning the different individual reactions to various drugs under study.*

The final integrative workshop asked that, based on the professional and investigative scope, they exemplify how they would apply the elements studied in the three topics. The proposals were somewhat general still. They focused more on integrating the utility of the contents addressed throughout the postgraduate course and on becoming aware of the displacement of enunciation during future research processes. As well as highlighting the creativity of the postgraduate as a theoretical effort that not only cited authors but approached thinkers who articulate paradigm shifts, as confluences and disagreements.

Also, the possibility of learning about mixed methodological designs was highly valued, and intertwining opinions from the different professional knowledge gathered in the first virtual postgraduate on research paradigms, carried out at the Faculty of Health Technology, UCMH. Everyone asked that learning continue through advice or new postgraduates, which is already being done through tutoring new research works, advice for publications, and planning the second edition of the postgraduate course.

Finally, it should be noted that the course's closing coincided with the most severe moment of the pandemic in Cuba. The following opinion from one of the participants expresses this:

> *The topics debated in the forums were extremely interesting, and we, the participants, must propose from our areas of action that another version be carried out in which at least the heads of our faculty departments participate, so that they can multiply experiences and knowledge. Take care to keep doing and be able to tell the story when this tough moment passes.*

Conclusions

The postgraduate program of *rethinking research paradigms in the face of new realities* was a proposal put forth during times of contingency, aiming to provide educators at UCMH, under conditions of social distancing, with: a) novel methodological resources for understanding the causes of the epidemiological emergency from a scientific standpoint, b) encouragement to carry out research and publications in a more dynamic manner than usual, given the warranted situation.

The writing of this current article has allowed us to delve into what has been achieved, in order to be certain that beyond the eventualities that occurred, this experience is valid and allows for its continuity and improvement. In the upcoming second edition of the postgraduate program, the bibliography should be updated with new publications on the behavior of SARS-CoV-2, as well as rethinking certain didactic activities and enhancing dissemination, since the expansion of virtuality is one of the positive gains that the pandemic has left us

References

Almeida, N. (1992). *Epidemiología sin números. Una introducción critica a la ciencia epidemiológica*. Organización Pamericana de la Salud. https://iris.paho.org/bitstream/handle/

10665.2/3108/Epidemiologia%20sin%20numeros.pdf?sequence=1

Almeida, N. (2007). Por una epidemiología con (más que) números: cómo superar la falsa oposición cuantitativo-cualitativo. *Rev Salud Colectiva*, 3(3), 229-233. http://www.scielo.org.ar/scielo.php?script=sci_arttext&pid=S1851-82652007000300001

Basile, G. (2020). SARS-CoV-2 en América Latina y Caribe: Las tres encrucijadas para el pensamiento crítico en salud. *Ciência & Saúde Coletiva*, 25 (9), aprox. 12p. https://www.scielo.br/pdf/csc/v25n9/1413-8123-c sc-25-09-3557.pdf

Basile, G. & Feo, O. (2021). *Las tres "D" de las vacunas del Sars-Cov-2 en América Latina y el Caribe: determinación, dependencia y descoordinación*. CLACSO. https://www.clacso.org/las-tres-d-de-las-vacunas-del-sars-cov-2-en-america-latina-y-el-caribe-determinacion-dependencia-y-descoordinacion/

Breilh, J. (2015). Epidemiología del siglo XXI y ciberespacio: repensar la teoría del poder y la determinación social de la salud. *Rev Bras Epidemiol*, 18 (4), 972-982 https://www.scielo.br/scielo.php?pid=S1415790X2015000400972&script=sci_abstract&tlng=es

Breno, B. & Geoffrey P. (2020). *Alerta global. Políticas, movimientos sociales y futuros en disputa en tiempos de pandemia*. CLACSO. http://biblioteca.clacso.edu.ar/clacso/ se/20200826014541/Alerta-global.pdf.

Cascante, J. (2011). *Métodos mixtos de investigación*. https://core.ac.uk/download/pdf/67707196.pdf

Coicaud, S.M., Martinelli, S.I. & Rozenhauz, J. (2021). Recapacitando acerca de la capacitación docente en tiempos de virtualización. *Virtualidad, Educación y Ciencia*, 24(12), 101-107. https://revistas.unc.edu.ar/index.php/vesc/article/view/36314

Colmenares, A. M. (2012). Investigación-acción participativa: una metodología integradora del conocimiento y la acción. *Revista Latinoamericana de Educación*, 3(1), 103-115. https://dialnet.unirioja.es/servlet/articulo?codigo=4054232

Cornejo, I. & Rufer M. (2020). *Horizontalidad: hacia una crítica de la metodología*. México: CLACSO. https://www.clacso.org/horizontalidad-hacia-una-critica-de-la-metodologia/

Corona, S. (2017). *Flujos metodológicos desde el Sur latinoamericano. La zona de la comunicación y las Metodologías Horizontales*. CLACSO. https://www.clacso.org.ar/librerialatinoamericana/libro_detalle.php?id_libro=1977ypageNum_rs_libros=0y orden=nro_orden

De Sousa, S. B. (2020). El coronavirus y nuestra contemporaneidad. 35-40. Bringel, B. y Pleyers, G. (Eds.). (2020). *Alerta global. Políticas, movimientos sociales y futuros en disputa en tiempos de pandemia*. Buenos Aires: CLACSO. http://biblioteca.clacso.edu.ar/clacso/se/2018041

9015342/Condenados_a_la_reflexividad.pdf

Estévez, E. (2019). *Entre el pensamiento humanista y el paradigma científico: el problema de las culturas*. La Habana: Editorial UH.

Gamboa, Y., Lugo, M. & García, A. (2020). Retos y desafíos de la Biotecnología cubana en el enfrentamiento a la COVID-19. *Revista INFODIR*, 16 (33), 32: e_883. https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=9861

Kuhn, T. S. (1971). *La estructura de las revoluciones científicas*. Fondo de Cultura Económica

Lage, A. (2018). *La Osadía de la ciencia*. La Habana: Editorial Academia

Machado, E. (2020). Una reflexión filosófica de la ciencia en tiempos del coronavirus. *Rev. Anales de la Acad. Ciencias de Cuba, 10(2)*. http://www.revistaccuba.cu/index.php/revacc/article/ view/871

Maldonado, C. E. (2016). Transformación de la no-Complejidad a la Complejidad. *Revista Ingenería, 2*1 (3), 411-426. https://doi.org/10.14483/udistrital.jour.reving.2016.3.a10

Maldonado, C. E. (2021a). Un mundo con temblores y terremotos. *Le Monde Diplomatique*, edición 209, abril. https://www.desdeabajo.info/ediciones/itemlist/category/422-edicion-n-209-le-monde-diplomatique.html

Maldonado, C. E. (2021b). Fenomenología de la pandemia. En: *Le Monde Diplomatique*, edición 207, febrero. https://www.researchgate.net/publication/349290280_Fenomenologia_ de_la_Pandemia

Martínez, E. (2021). La COVID-19 en Cuba y las oportunidades para su gestión en momento de crisis. *Revista INFODIR*, 35(2), e_1007. http://www.revinfodir.sld.cu/index.php/infodir/article/ view/1007

Medina, B, R. M. (2021a). Covid 19 e Investigación científica: ¿replanteo de paradigmas? *Revista Med Clín. Soc*, 5(3). https://doi.org/10.52379/mcs.v5i3.209

Medina, B. R. M. (2021b). Fascinación tecnológica y comunicación humana en tiempos de la Covid 19. *Educación y Sociedad*, 19(3), 206-222. https://dialnet.unirioja.es/servlet/articulo?codigo=8085364

Melero, N. (2012). El paradigma crítico y los aportes de la investigacion acción participativa en la transformación de la realidad social: un análisis desde las ciencias sociales. *Rev Cuestiones Pedagógicas*, 21(1), 207-22. https://idus.us.es/handle/11441/12861

Morin, E. (1984). *Ciencia con consciencia*. Editorial Anthropos

Morin, E. & Delgado, C. J. (2017). *Reinventar la educación. Abrir caminos a la metamorfosis de la humanidad*. La Habana: Editorial UH

Nuñez, J. N. (2017). Los métodos mixtos en la investigación en educación: hacia un uso reflexivo. *Cadernos de Pesquisa*, 47 (164), 632-649. https://www.scielo.br/scielo.php?pid= S010015742017000200011&script=sci_abstract&tlng=es

Muñoz, C. (2013). Métodos mixtos: una aproximación a sus ventajas y limitaciones en la investigación de sistemas y servicios de salud. *Rev Chil Salud Pública*, 17 (3), 218-223. https://revistasaludpublica.uchile.cl/index.php/RCSP/article/view/28632

Piovani, J. I. &, Muñiz, T. L. (2018). *¿Condenados a la reflexividad? Apuntes para repensar el proceso de investigación social*. CLACSO. http://biblioteca.clacso.edu.ar/clacso/se/20180419015342/Condenados_a_la_reflexividad.pdf

Puiggrós, A. (2021). *Los desafíos post-pandemia para la educación en América Latina*. https://www.youtube.com/results?search_query=adriana+-+puiggr%C3%B3s+los+desaf%C3%ADos+postpandemia+para+la+educaci%C3%B3n+en+am%C3%A9rica

Ramonet, I. (2020). Ante lo desconocido. La pandemia y el sistema-mundo. *Cubadebate*. http://www.cubadebate.cu/especiales/2020/04/25/especial-de-ignacio-ramonet-ante-lo-desconocido-la-pandemia-y-el-sistema-mundo/

Sequera, M. (2014). Investigación acción: un método de investigación educativa para la sociedad actual. *Rev Arjé*, 18(10), 223-229. http://servicio.bc.uc.edu.ve/educacion/arje/arj18/art23.pdf

Torres, T. (2015). Las exigencias lógicas en la investigación científica. Una mirada desde la solución al dilema. *Rev. Cubana Edu. Superior*, 34(3), 131-139. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0257-43142015000300010

Zacca, G., Diego, F. & López, J. A. (2008). Universidad Virtual de Salud: una nueva etapa. *ACIMED*, 17(3), 1-10. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1024-94352008000300006

Zamora, M. R. (2019). Importancia de la relación complementaria, entre las ciencias humanísticas y la tecnología. *Rev del Instituto de Bioética Juan Pablo II* (mayo-agosto), 25-32.

The emotional intelligence of teachers for the learning of biology in university students

La inteligencia emocional de los docentes para el aprendizaje de la biología en los estudiantes universitarios

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Abstract

Emotional intelligence is the ability of an individual to recognize their own emotions and those of others; this capacity enables them to identify feelings, guide thinking, and adapt their behavior to the environment appropriately. The aim of this research was to analyze the emotional intelligence of teachers in relation to the biology learning of university students at the University of Zulia. The employed methodology was quantitative, descriptive in nature, and with a non-experimental and cross-sectional design. The studied population consisted of 5 teachers and 38 students, who were administered a digital questionnaire containing information about the variables under study. Reliability was determined through Cronbach's Alpha, resulting in a value of 0.964. For data processing, SPSS 27 was used. The results indicate that teachers exhibit deficiencies in the components of emotional intelligence. Additionally, learning styles based on the modulating agent in students show a similar inefficiency, reflecting a weakness in this area. It is concluded that the emotional intelligence of teachers in the context of biology learning is insufficient. Therefore, it is recommended that educators strengthen these skills to enhance teaching and learning in their students..

Keyword: emotional competencies, emotional education, emotional intelligence, emotional teacher, types of learning.

Resumen

La inteligencia emocional es la habilidad del individuo para reconocer sus propias emociones y las de otras personas; esta capacidad le permite identificar sentimientos, orientar el pensamiento y adaptar su conducta al entorno de manera adecuada. El objetivo de esta investigación fue analizar la inteligencia emocional de los docentes en relación con el aprendizaje de biología de los estudiantes universitarios de la Universidad del Zulia. La metodología empleada fue cuantitativa, de tipo descriptiva y con un diseño no experimental y transversal. La población estudiada estuvo constituida por 5 profesores y 38 alumnos, a quienes se les aplicó un cuestionario digital con información sobre las variables en estudio. La confiabilidad se determinó a través del Alfa de Cronbach, resultando en un valor de 0,964. Para el procesamiento de los datos, se utilizó el programa SPSS 27.Los resultados indican que los docentes presentan deficiencias en los componentes de la inteligencia emocional. Además, los estilos de aprendizaje según el agente modulador en los estudiantes muestran una similar ineficiencia, denotando una debilidad en esta área. Se concluye que la inteligencia emocional de los docentes en el contexto del aprendizaje de biología es insuficiente. Por lo tanto, se recomienda que los educadores fortalezcan estas habilidades para potenciar la enseñanza y el aprendizaje en sus educandos.

Palabras clave: competencias emocionales, educación emocional, inteligencia emocional, docente emocional, tipos de aprendizajes.

Introduction

This article focuses on the emotional intelligence of educators, pivotal as they are the agents promoting the comprehensive development of students. It is argued that teachers should equip themselves with skills that allow them to better identify the emotions of their students. Hence arises the importance of nurturing empathy, communication, and self-control, deemed essential for educators since they strengthen interactions with students.

This training not only enables the teacher to renew their personality and pedagogical methodology but also leads them to consider the emotional needs of their students. This, in turn, guides them in choosing strategies and resources and in perceiving individualized learning styles. In this study, the teacher's emotional intelligence is addressed without neglecting that of the students. Given that educators serve as role models, students tend to adopt similar behaviors, benefiting their own growth.

Romero (2022) contends that emotional intelligence is vital for the mental and social balance of individuals, as it allows them to understand their environment and make informed decisions amidst diverse daily circumstances. According to Goleman (2022), emotional intelligence plays a crucial role in education: it boosts motivation, controls impulses, regulates emotions, and promotes student integration. Additionally, it reinforces personal and social skills and values such as self-esteem, autonomy, communication, empathy, and self-control.

On the other hand, Arrabal (2018) breaks down emotional intelligence into several components: (a) Perception: involves interpreting, feeling, and experiencing emotions and feelings. (b) Assimilation: suggests that emotions and thoughts can be integrated. If one understands how to leverage emotions for the benefit of thought, individuals will make better decisions. (c) Understanding: is based on recognizing others' emotions and identifying one's own, which eases connecting with others. (d) Regulation: is associated with the ability to manage emotional responses in various situations, whether stressful, positive, or negative.

According to Bariso (2020), emotional intelligence includes: (a) intrapersonal intelligence, which relates to the ability to know oneself; it also includes self-esteem, self-control, self-love, self-concept, autonomy, and academic motivation; and (b) interpersonal intelligence, which relates to the motivation and ability to understand the emotions and behaviors of other individuals. Additionally, Pincay *et al.* (2018) explain that the complex environment in which teachers have to work clearly requires an increase in emotional intelligence, which enables them to be resilient, adapt to situations, and fully cope with the daily occurring changes.

Furthermore, Waissbluth (2019) states that the global educational aim is the holistic development of students, both cognitively and emotionally. To achieve this, educators must possess robust emotional intelligence and also the ability to plan lessons with themes that incorporate the development of skills, addressing them clearly and cross-curricularly to optimise students' emotional growth.

In this vein, Tacca *et al.* (2020) articulate that in Latin America, teachers should not only focus on imparting subject knowledge and appropriate behavioural patterns but also on emotions and feelings. Educators need to understand student behaviour from an emotional perspective, not just a behavioural one, and learn how to teach emotional intelligence. This approach should not only be implemented in the educational setting but also in familial and social contexts.

In this regard, Segura *et al.* (2018) assert that those lacking developed emotional intelligence impact interpersonal relationships, collaboration, problem-solving abilities, teamwork, and the motivation to achieve life's goals and objectives. Educators with a high degree of emotional intelligence are more empathetic, positive, and relate better with others, demonstrating higher job satisfaction. Given these conditions, Mejía & Londoño (2021) state that emotions conveyed by teachers induce behavioural changes in students that influence learning; therefore, educators become the most crucial emotional guides for students, serving as role models.

In this scenario, a teacher capable of capturing, understanding, and managing emotions will achieve personal balance and social wellbeing. According to Acosta & Blanco (2022), emotional intelligence is linked to several human capacities such as assimilation, perception, evaluation, learning, generation, comprehension, regulation, and expression of emotions. In light of the foregoing, Macazana & Romero (2021) emphasise the need for teacher training to bridge the educational gap in the development of skills, which have been less prioritised for managing thoughts, feelings, emotions, and the acquired skills to understand reality, enhancing both personal and professional growth.

For Bariso (2020), emotional intelligence includes: (a) intrapersonal intelligence, which is related to the ability to know oneself; it also includes self-esteem, self-control, self-love, self-concept, autonomy, and academic motivation; and (b) interpersonal intelligence, which is related to the motivation and ability to understand the emotions and behaviors of other individuals. Similarly, Pincay *et al.* (2018) explain that the complex environment in which teachers have to work clearly requires an increase in emotional intelligence, which allows them to be resilient, adapt to situations, and fully face the changes that occur on a daily basis.

Now, Waissbluth (2019) states that the purpose of education worldwide is the holistic development of students, both cognitively and emotionally. To achieve this, teachers must have good emotional intelligence and also the ability to plan classes with topics that include the development of competencies that address emotions clearly and holistically in the curriculum, as a way to optimize the emotional development of students.

In this context, Tacca *et al.* (2020) express that in Latin America, teachers must focus not only on teaching subject knowledge and correct behavioral patterns, but also on emotions and feelings. The teacher must understand student behavior from an emotional perspective, not just behavioral, and learn how to teach emotional intelligence. This should not only be applied in the educational environment but also in the family and social contexts.

In this sense, Segura *et al.* (2018) state that someone who hasn't developed emotional intelligence affects interpersonal relationships, collaboration, problem-solving skills, teamwork, and motivation to achieve goals in life. Teachers with a high degree of emotional intelligence are more empathetic, positive, and relate better to others, and they show greater job satisfaction. Given these conditions, Mejía & Londoño (2021) affirm that emotions expressed by teachers provoke behavioral changes in students that influence learning; therefore, teachers become the most important emotional guides for students, serving as examples and role models.

In this scenario, a teacher who can perceive, understand, and control emotions will achieve their own balance and social well-being. According to Acosta & Blanco (2022), emotional intelligence is related to various capacities of individuals, such as assimilation, perception, evaluation, learning, generation, understanding, regulation, and expression of emotions. In light of the above, Macazana & Romero (2021) point out that teacher training is needed to close the educational gap in the development of skills that have been less important for managing thoughts, feelings, emotions, and acquired abilities to understand reality and to improve both personally and professionally.

On the other hand, Fuenmayor (2016) notes that in Venezuela, teachers need to change education and teach from emotions to promote different learning styles in students. Therefore, they must keep emotional competencies in mind during their pedagogical practice. In other words, a teacher with emotional skills can create a suitable working environment and better recognize students' emotional states. This leads to an empathetic connection that provides security to the student.

In this sense, Romero *et al.* (2022) indicate that there is a need to include new areas of work related to emotional intelligence, such as perception, assimilation, understanding, emotional regulation, communication, and interpersonal relationships, among others. Likewise, it is necessary to train teachers to understand the role of emotions in the school environment, as this will enable the development of more effective teaching activities.

Therefore, it is necessary to incorporate this teaching model to have a positive effect on the daily work results of the teacher. Since it impacts learning, mental health, effectiveness of social relationships, and job performance, it fosters a positive classroom environment to reduce the inherent stress of the profession and improves communication and relationships among students, colleagues, and the educational community. Teachers with developed emotional intelligence project a understanding personality in their daily work, which goes beyond observing students' behavior. It involves delving into feelings, understanding what behaviors mean, comprehending them, and creating an atmosphere of dialogue, understanding, and active listening.

According to Heredia & Sánchez (2020), a teacher must possess an education that enables them to create a positive learning environment that promotes students' acquisition of knowledge. This way, the educational environment becomes a more positive reflection of society. Moreover, they should encourage an appropriate school atmosphere, which is linked to physical and psychological development that fosters optimal learning, reduces disruptive behaviors, and

nurtures the formation of good groups and empathy.

On the other hand, Bulás *et al.* (2020) state that when these basic emotional competencies are developed, it becomes easier to build others such as autonomy, commitment, and critical thinking. When a teacher is skilled in emotional teaching, students enjoy school more, build their self-esteem easily, become more creative, and recognize the humanity in each student. All of this reduces discipline problems and creates a less hostile school environment.

Recently, teachers have become aware of the impact that students' emotions have. However, very few educational institutions have aligned their content and academic goals with emotional intelligence. In this regard, Ávila (2019) suggests that there is shared responsibility for the socio-emotional development of students in the educational process. This begins with the harmony that should exist within the family, as it is the emotional model that forms the student's initial environment for socialization and emotional education. The second is the academic environment, where, with the support of laws, strategies, and resources, teachers must promote emotional intelligence in the classroom.

On another note, Coll (2017) explains that people's learning consists of the reception, assimilation, and accommodation of knowledge. Similarly, Kolb (2014) notes that learning is observed when individuals acquire or modify skills, knowledge, and behaviors due to lived experiences. Therefore, learning is the process of constructing experience and adapting it to new situations. Learning is part of personal development and is most effective when the individual is motivated, willing to learn, and puts in effort. For this, they have to pay attention, use their memory, and employ logical reasoning.

In this context, Ojeda (2022) points out that for effective learning to occur, the following conditions are necessary: methods, procedures, strategies, resources, motivation, will, and appropriate time management. Therefore, teachers must possess emotional intelligence and manage students' emotions effectively, as various consequences can arise, such as social issues like bad moods, isolation, withdrawal, dissatisfaction, and dependence.

The study was conducted at the University of Zulia, involving students and teachers from the biology education program. The aim was to analyze the emotional intelligence of teachers for the biology learning of university students at the University of Zulia. As previous studies indicate, it is necessary for teachers to have developed components of emotional intelligence (self-motivation, self-regulation, motivation, empathy, and social skills) to effectively conduct their classes and enable students to achieve lasting, useful, applicable, and transferable learning outcomes.

According to Escolano (2018), the development of emotional intelligence is in the hands of everyone and depends on the conditions individuals experience throughout their lives. Childhood is a crucial stage where these capacities are developed. Learning them is essential as they allow understanding how to interact with the people around us. Humans need to develop emotionally

and intellectually throughout their lives to progress both cognitively and personally.

Components of Emotional Intelligence

Goleman states that the components of emotional intelligence include: (a) Emotional self-awareness, which refers to individuals' ability to identify, recognize, and understand their own emotions. (b) Emotional self-regulation, the capacity to control and manage emotions and reactions. (c) Motivation, the ability to self-motivate and motivate others, setting and working toward goals. (d) Empathy, the capacity to understand and comprehend others' emotions. e) Social skills, enabling effective interaction and communication with others, fostering healthy interpersonal relationships and collaboration within teams.

Student Learning

Learning involves the assimilation of knowledge and behavioral change; it's a shared task between teachers and students. To achieve this, Acosta & Barrios (2023) emphasize the need for teachers to fulfill their role as agents of capacity development through innovative strategies. They should recognize the students' role in learning and choose methodologies that enable students to acquire knowledge.

Arhuiri (2021) emphasizes that students must be aware of and committed to their own learning. Adequate guidance can lead them to reflect on their learning. Therefore, achieving academic excellence requires the commitment of both teachers and students. This involves proper planning, execution, control, and monitoring of the learning process, as well as clear evaluation criteria that students are aware of.

Learning Styles

There are various learning styles, each describing how students acquire knowledge differently. For the purposes of this study, the learning style according to the modulating agent proposed by Kolb (2014) was selected. Kolb suggests that learning style is influenced by genetics, life experiences, and social situations. Information can be received and absorbed in concrete, creative, abstract, or adaptive ways. These styles are classified as: (a) Convergent learning: This occurs when a person perceives information concretely and is capable of finding practical solutions. They can synthesize knowledge graphically and easily create diagrams, plans, maps, others.

(b) Divergent learning: These individuals offer multiple solutions to various situations due to their creativity. They tend to generate innovative ideas and are often artists, designers, creators, and inventors. (c) Assimilative learning: People with this style excel in abstract knowledge and are more inclined towards research, programming, and engineering. (d) Accommodative learning: This style is characterized by adaptability to different situations, a strong desire to interact socially, and leadership qualities. Individuals with this style are good speakers and presenters.

Methodology

During the course of the research, it is necessary to determine which paradigm is suitable to be used as guidance during the study's development. This is why Hernández & Mendoza (2018) point out that without a clear understanding of the models that guide the researcher's approach in the study, scientific research cannot be conducted. In this context, the method used was positivist, as described by Arias (2016), which deals with the existence of a specific way to comprehend the investigated fact or phenomenon, thus proposing the use of this technique as authenticity of knowledge.

Furthermore, the type of research conducted in the study was descriptive. According to Palella & Martins (2017), it aims to understand certain phenomena through systemic criteria that allow observation of behavior. Similarly, this type of study does not involve testing hypotheses, but rather describes the subject in terms of predefined judgments. They also indicate that it is a mechanism aimed at obtaining information about the situation of the phenomenon under study.

On the other hand, the study was non-experimental. According to Hernández & Mendoza (2018), its purpose is to investigate the values of events. This means that the study's objective is to analyze the state of a variable, individual, or entity in order to provide a description. Similarly, it was cross-sectional, as a specific scenario was chosen for data collection: the Faculty of Humanities and Education at the University of Zulia.

According to Sabino (2014), the population is a group of subjects that constitute all individuals in a study. Due to its small size, a population census was conducted where all individuals participated in the research. It consisted of 5 teachers and 38 students, the latter from the following semesters: 18 from the sixth, 13 from the seventh, and 7 from the eighth. They were selected because of their advanced academic training and their ability to provide a more objective judgment.

For data collection, the technique used was a survey, as described by Suárez *et al.* (2022). It involves a set of questions applied to the individuals who participated in the research, in this case, teachers and biology students from the University of Zulia. Based on this, the tool for data collection was a questionnaire, defined by Arias (2016) as a document consisting of well-formulated, organized, and related questions related to indicators, dimensions, and variables.

To gather information, the instrument employed was a questionnaire, which was approved by six experts in education and methodology before its use. Its reliability was 0.964. It was transcribed into a digital questionnaire version using "Google Forms," where questions were organized for each indicator that composed the study's variables. The digital link was sent via email and WhatsApp to the respondents. Once the information was collected, it was analyzed using Excel. The data were subsequently classified and grouped for interpretation and discussion with the selected theories.

The instrument contained 4 variations due to the type of questions in the questionnaire. In other words, the criteria for choosing the scale correspond to each subject's direction. The response

options were (4) Always; (3) Almost always; (2) Almost never; (1) Never. In this study, only 4 alternatives were considered. This, according to Hernández *et al* (2014), is done with the purpose of "committing the subject or forcing them to pronounce themselves favorably or unfavorably" (p. 244).

Similarly, a scale, as indicated by Hernández & Mendoza (2018), was developed to display a set of categories allowing the evaluation of variables, dimensions, and indicators, with the aim of facilitating the interpretation of the data that can be found. Furthermore, the process of analyzing the information enables the quantitative evaluation of the survey's outcome through the classification and tabulation of data for the subsequent formulation and interpretation of the process.

Table 1. *Criteria for interpreting responses.*
Source: Self-made (2023).

Variables	Values	Options	Quntitative value	Categories
Emotional intelligence of teachers and biology learning of studentsInteligencia emocional de los docentes y aprendizaje de la biología de los estudiantes.	Positive	Always	4	Efficient
		Almost always	3	Not very efficient
	Negative	Almost never	2	Inefficient
		Never	1	Very inefficient

Results

In the following tables presented below, the results of the variables and dimensions are expressed in frequencies, percentages, and the interpretation of the scale.

Table 2. *Components of emotional intelligence.*

Indicadores	Opcions	Always		Almost always		Almost never		Never		Total		Categories	
	Subjetcs	Stu.	Teac.	Stu.	Teac.	Stu.	Teac.	Stu	Teac.	Stu.	Teac.	Stu..	Teac.
Self-awareness	Fa	3	3	19	1	13	1	3	0	38	5	Not very efficient	Efficient
	%	7,9	60,0	50,0	20,0	34,2	20,0	7,9	0	100	100		
Self-regulation	Fa	4	1	18	3	14	1	2	0	38	5		Not very efficient
	%	10,5	20,0	47,4	60,0	36,9	20,0	5,2	0	100	100		
Motivation	Fa	11	1	14	2	10	1	3	1	38	5		
	%	28,9	20,0	36,9	40,0	26,3	20,0	7,9	20,0	100	100		
Empathy	Fa	10	2	17	1	8	1	3	1	38	5		Efficient
	%	26,3	40,0	44,7	20,0	21,1	20,0	7,9	20,0	100	100		
Social skills	Fa	9	2	21	1	7	1	1	1	38	5		
	%	23,7	40,0	55,3	20,0	28,4	20,0	2,6	20,0	100	100		

Source: Self-made (2023).

In Table 2, the results of the "components of emotional intelligence" dimension are shown. Re-

garding the "self-awareness" indicator, 50% of biology education students expressed that teachers almost always know how to identify, recognize, and understand their own emotions and those of others; placing these results in the category of low efficiency. On the other hand, biology teachers, at 60%, claim that they always know how to interpret their emotions and those of other individuals; placing themselves in the efficient category.

For the "self-regulation" indicator, 47.4% of students expressed that teachers are almost always capable of controlling and regulating emotions and reactions; placing these results in the category of low efficiency. In the case of teachers, 60% stated that they almost always regulate emotions and reactions due to various situations they face in their academic practice and daily life; placing themselves in the category of low efficiency.

In the "motivation" indicator, students, at 36.9%, state that teachers almost always, despite the circumstances they live in, are motivated, guide students, set goals, and work to achieve them; placing these results in the category of low efficiency. On the other hand, teachers, at 40%, expressed that they almost always have motivation and set goals for their personal and professional lives; placing these results in the category of low efficiency.

In the "empathy" indicator, students, at 44.7%, point out that teachers almost always have the ability to understand the emotions of others; placing these results in the category of low efficiency. Whereas teachers, at 40%, express that they always have the ability to identify and understand people's emotions; placing these results in the efficient category.

Regarding "social skills," students express that 44.7% of teachers almost always relate and communicate effectively with others, establish healthy interpersonal relationships, and work in teams; placing these results in the category of low efficiency. However, teachers, at 40%, affirm that they always establish communication with their colleagues and students; placing these results in the efficient option.

Table 3. *Learning styles according to the modulating agent.*

Indicators	Options	Always		Almost always		Almost never		Never		Total		Categories	
	Subjetcs	Stu.	Teac.	Stu.	Teac.	Stu.	Teac.	Stu.	Teac.	Stu.	Teac.	Stu.	Teac.
Convergent learning	Fa	5	1	20	2	10	1	3	1	38	5	Not very efficient	Not very efficient
	%	13,2	20,0	52,6	40,0	26,3	20,0	7,9	20,0	100	100		
Divergent learning	Fa	14	1	19	3	3	1	2	0	38	5	Not very efficient	Not very efficient
	%	36,9	20,0	50,0	60,0	7,9	20,0	5,2	0	100	100		
Assimilative learning	Fa	15	1	13	2	7	1	3	1	38	5	Efficient	Not very efficient
	%	39,5	39,5	20,0	34,2	40,0	20,0	7,9	20,0	100	100		
Accommodative learning	Fa	9	9	1	18	2	1	2	1	38	5	Not very efficient	Not very efficient
	%	23,7	20,0	47,4	40,0	23,7	20,0	5,2	20,0	100	100		

Source: Self-made (2023).

Table 3 displays the results of the "learning styles" dimension according to the modulating agent. For the "convergent learning" indicator, biology education students, at 56.2%, express that they almost always perceive information in a concrete manner and are capable of finding practical solutions to their problems; placing these results in the category of low efficiency. On the other hand, biology teachers, at 40%, indicate that almost always students receive accurate information and seek solutions to the situations they encounter; placing these results in the category of low efficiency.

Regarding the "divergent learning" indicator, 50% of the students indicate that they almost always offer multiple solutions to problems, show creativity, and generate innovative ideas; placing these results in the category of low efficiency. Teachers, at 60%, agree with the students that they almost always seek to solve difficulties, are creative, and innovative; placing these results in the option of low efficiency.

In the case of the "assimilative learning" indicator, 39.5% of students mention that they always have the capacity for abstract knowledge and excel in research; placing these results in the efficient category. Whereas teachers, at 40%, indicate that students almost always develop this type of learning; placing the results in the option of low efficiency.

In relation to the "accommodative learning" indicator, 47.4% of biology education students indicate that they are almost always capable of quickly adapting to different situations, leading, and socially interacting; placing these results in the option of low efficiency. Biology teachers, at 40%, indicate that almost always students have the ability to communicate easily with their peers; placing these results in the option of low efficiency.

Discussion of results

To establish a theoretical framework that provides an explanation for the study's phenomenon, it is relevant to begin with Goleman's conception of emotional intelligence. He defines it as the ability to perceive, understand, and regulate one's own emotions, as well as to understand and successfully relate to others. This capacity aids in making well-informed decisions, managing stress and interpersonal interactions successfully, and achieving personal and professional life goals.

Now, in studying certain indicators of emotional intelligence, which include self-awareness, self-regulation, motivation, empathy, and social skills (these being the components of emotional intelligence), Tacca *et al.* (2020) point out that teachers must have developed these components, which should manifest through the skills they demonstrate in interacting with students and selecting pedagogical mechanisms. This achievement is attainable through assertive decisions regarding strategies and resources implementation.

In this line of thought, concerning the self-awareness indicator, the results indicate a lack of ef-

ficiency. This suggests a weakness among teachers, as expressed by Barragán & Trejos (2022), considering it an essential professional competence that educators should possess. This self-awareness allows them to understand themselves, be conscious of their motivations, needs, thoughts, and feelings, and how these affect behavior and connections with others and the environment.

Regarding the indicator of self-regulation among teachers, the results differ from Gaeta's (2014) description, who refers to this ability as the capacity to manage and control one's own behavior, and to plan and monitor one's learning and professional development. This implies that teachers should be capable of identifying their strengths and weaknesses, setting realistic goals to improve their performance, seeking feedback and support, and adjusting their practices accordingly.

As for teachers' motivation, the indicator showed a weakness. This contradicts Durange's (2022) assertion, as teacher motivation is significant, affecting performance and the quality of education they provide. When a teacher is motivated, committed, and holds a positive attitude towards instruction, students' interest and commitment increase. Moreover, motivation can help teachers be more creative and innovative in their teaching methods and stay updated in their field of study.

According to the results, the empathy indicator exhibited weakness. This contrasts with Pincay *et al.*' (2018) statement that empathy is fundamental for educational success and student learning. It implies that teachers should put themselves in students' shoes to understand their feelings, thoughts, and motivations. An empathetic relationship between the teacher and the student promotes meaningful learning and reduces disciplinary problems. Hence, the teacher's empathy is essential for helping students integrate with peers and understand their needs.

Concerning the indicator of social skills, weaknesses were identified, as it was rated as inefficient. This contradicts Huambachano & Huaire's (2018) perspective, emphasizing the importance for teachers to connect with students with kindness, respect, empathy, humility, and trust. Moreover, teachers should possess effective communication skills, utilizing various resources such as oral, written, and body language. These skills are mainly acquired through learning, observation, imitation, experimentation, and information.

In this context, Extremera *et al.* (2020) point out that teachers' social and emotional skills are fundamental for achieving effective teaching objectives. Therefore, emotional inclusion in classrooms should be promoted, recognizing that teachers are perceived as the main role models for students' attitudes, behaviors, feelings, and emotions. Consequently, they should establish a healthy and intimate connection with students, understand their emotional state, teach them self-understanding, and facilitate conciliatory and calm conflict resolution.

On the other hand, Macazana *et al.* (2021) express the necessity for teachers to develop the components of emotional intelligence, as they influence students' behaviors. Therefore, tea-

chers need to recognize emotions that favor concentration, motivation, and all elements contributing to the assimilation of academic information and enhancing students' mental processes.

According to Hernández & Guárate (2017), as mediators between the subjects they teach and how students acquire that knowledge, teachers should serve as role models. Students spend a significant amount of time in class, making it essential to channel feelings and emotions through a mentor's image. However *et al.* (2017) indicate that for students to develop emotional feelings and skills associated with emotional intelligence, they require a teacher to be their emotional guide.

Similarly, Acosta & Villalba (2022) suggest that as teachers, it's essential not to forget that a significant part of fostering feelings and values occurs with the assistance of parents. Thus, activities with parents should be conducted, enabling them to be models for their children at home. School meetings with parents and children should also be held to discuss and provide a set of recommendations applicable at home.

Regarding the results obtained from the learning style dimension based on the modulating agent, such as convergent, divergent, assimilative, and accommodative learning, these were perceived as inefficient. This indicates weakness, contradicting Kold's (2014) assertions that learning is constructed from lived experiences and social situations. When combined, students focus on finding efficient solutions to specific problems, particularly situations involving logic and creativity, such as answering multiple-choice questions or solving problems recognizing they have a possible solution.

For the indicator of convergent learning, the results suggest inefficiency. This contradicts the viewpoints of Acevedo *et al.* (2016), who note that this occurs when a person perceives information concretely and can find practical solutions. It centers on acquiring cross-cutting competencies and encourages student participation in their own learning. It seeks to integrate different disciplines and approaches to solve complex problems, fostering critical thinking, problem-solving, and collaboration. Therefore, students need to engage in this type of learning to acquire necessary skills for their academic formation.

Concerning the indicator of divergent learning, the survey respondents indicated weakness. Silva (2018) states that this approach focuses on developing critical, creative, and flexible thinking skills, fostering inquiry, ingenuity, and generating multiple solutions instead of seeking a correct answer. This educational approach is designed to empower students and prepare them for real-world challenges.

For the indicator of assimilative learning, the results show weakness, differing from Rodríguez's (2020) description. According to him, this style involves integrating new information into pre-existing mental schemes that allow individuals to build knowledge and understanding of the surrounding world. In this sense, Blanco & Acosta (2023) note that it is an active process in

which individuals attempt to relate, argue, and comprehend new information, also allowing them to engage in research.

Finally, concerning the accommodative learning indicator, the results differ from the viewpoint of Tripodoro & De Simone (2015), as this style is characterized by active experimentation and practical tasks. Therefore, individuals tend to learn best when engaged in real-world situations, facing challenges, and directly solving problems. It's an adaptive style characterized by the ability to quickly adapt to new situations and make rapid decisions based on practical experience. Essential for learning biology and highly effective in fast-paced situations requiring swift reactions. According to Kolb, learning is fundamental as it enables individuals to adapt, improve, and make effective decisions based on past experiences. It also allows them to face new challenges, optimize behavior, and achieve the best outcomes in various environments and situations. The importance of learning style lies in helping individuals understand how they learn best, so they can adapt their style or way of acquiring knowledge. Furthermore, Kolb's model has been used in education to enhance teaching and learning, and to assist individuals in being more productive and effective team members.

Conclusions

Once the results have been analyzed, it can be indicated that, according to what the students expressed, it was evident that almost never do the professors in the Education in Biology program at the University of Zulia exhibit the components of emotional intelligence, placing these findings in the category of low efficiency. In the case of the teachers, they point out that they efficiently demonstrate the indicators of self-awareness, empathy, and social skills, but self-regulation and motivation are not very efficient. These results indicate a weakness in the teachers in this dimension; perhaps this is due to the social, economic, and political factors that teachers currently experience.

Regarding the case of learning according to the modulating agent, the results presented by the Education in Biology students indicate that they almost never acquire knowledge. They attribute this to the possibility that teachers may not properly employ the components of emotional intelligence and methodologies so that students can apply learning strategies appropriately, placing these results in the category of low efficiency. On their part, the teachers express that students rarely apply learning styles in their classes, placing these results in the category of low efficiency as well. They also show concern, as this has an impact on their professional development.

References

Acevedo, B. A., Cachay Boza, O., y Linares Barrantes, C. (2016). Los estilos convergente y divergente para resolución de problemas. La perspectiva de los sistemas blandos en el aprendizaje por experiencias. *Industrial Data*, 19(2), 49–58. https://doi.org/10.15381/idata.v19i2.12815

Acosta, S. y Barrios, M. (2023). La enseñanza contextualizada para el aprendizaje de las Ciencias Naturales. *Revista de la Universidad del Zulia*, 14(40), 103-126. https://doi.org/10.46925//rdluz.40.06

Acosta, F. S. F. y Blanco Rosado, L. A. (2022). *La inteligencia emocional: un concepto humanizador para la educación en tiempos postpandemia:* Capítulo 1. Editorial Idicap Pacífico, 7–25. https://doi.org/10.53595/eip.006.2022.ch.1

Acosta, S. y Villalba. A. (2022). Educación para la paz como mecanismo de convivencia ciudadana. *Revista Honoris Causa*, 14(2), 7–27. https://revista.uny.edu.ve/ojs/index.php/honoris-causa/article/view/156

Arhuiri, R. (2021). Aprendizaje significativo en estudiantes de educación secundaria de Juliaca. *Revista Latinoamericana Ogmios*, 1(2), 151–163. https://doi.org/10.53595/rlo.v1.i2.014

Arias, F. (2016). *El proyecto de investigación. Introducción a la metodología científica.* 7ma. Edición. Episteme.

Arrabal, E. (2018). *Inteligencia emocional.* Editorial Elearning, SL.

Ávila, A. (2019). Perfil docente, bienestar y competencias emocionales para la mejora, calidad e innovación de la escuela. *Boletín Redipe*, 8(5), 131-144. https://dialnet.unirioja.es/servlet/articulo?codigo=7528260

Bariso, J. (2020). Inteligencia emocional para la vida cotidiana: una guía para el mundo real. Editorial Sirio SA.

Barragán, C. y Trejos, C. (2022). Análisis de los juicios morales para desarrollar la inteligencia emocional y la convivencia escolar. *Scientiarium*, (3). https://investigacionuft.net.ve/revista/index.php/scientiarium/article/view/680

Blanco, L. y Acosta, S. (2023). La argumentación en los trabajos de investigación: un aporte científico al discurso académico. *Delectus*, 6 (1), 29-38. https://doi.org/10.36996/delectus.v6i1.205

Bulás, M., Ramírez, A., y Corona, M. (2020). Relevancia de las competencias emocionales en el proceso de enseñanza aprendizaje a nivel de posgrado. *Revista de estudios y experiencias en educación*, 19(39), 57-73. http://dx.doi.org/10.21703/rexe.20201939bulas4

Cejudo, J. y López, D. M. L. (2017). Importancia de la inteligencia emocional en la práctica docente: un estudio con maestros. *Psicología educativa*, 23(1), 29-36. https://doi.org/10.1016/j.pse.2016.11.001

Coll, C. (2017). *La personalización del aprendizaje escolar.* Ediciones SM.

Durange, A. (2022). La inteligencia emocional como herramienta de aprendizaje para el rendimiento académico. *Scientiarium*, (3). https://investigacionuft.net.ve/revista/index.php/scientiarium/article/view/679

Escolano, A. (2018). *Emociones & Educacion: La construcción histórica de la educación emocional.* visión libros.

Extremera, N., Mérida, S., Rey, L., y Peláez, M. (2020). Programa "CRECIENDO" (Creando Competencias de Inteligencia Emocional en Nuevos Docentes): Evidencias preliminares y su utilidad percibida en la formación inicial del profesorado de Secundaria. *Know and Share Psychology*, 1(4). DOI: https://doi.org/10.25115/kasp.v1i4.4340

Gaeta, M. (2014). La implicación docente en los procesos de autorregulación del aprendizaje: una revisión sistemática. *Revista de Comunicación de la SEECI*, 35E, 74–81. https://doi.org/10.15198/seeci.2014.35E.74-81

Goleman, D. (2015). *El cerebro y la inteligencia emocional: nuevos descubrimientos.* B de Books.

Goleman, D. (2022). *La inteligencia emocional: Por qué es más importante que el cociente intelectual.* Ediciones B.

Fuenmayor, A. (2016). Violencia y agresión verbal en estudiantes de un liceo de la ciudad de Maracaibo-Venezuela. *Revista San Gregorio*, (11), 48-57. https://dialnet.unirioja.es/servlet/articulo?codigo=5585731

Hernández, C. y Guárate, A. (2017). *Modelos didácticos: Para situaciones y contextos de aprendizaje.* Narcea Ediciones.

Hernández,-S. R., Fernández,C. C., y Baptista, P., (2014). *Metodología de la Investigación.* 6ta. Edición. McGraw-Hill Interamericana.

Hernández,S. R. y Mendoza, C. (2018). *Metodología de la Investigación: Las rutas cuantitativas, cualitativas y mixtas.* 7ma. Edición. McGraw-Hill Interamericana.

Heredia, Y., y Sánchez, A. (2020). *Teorías del aprendizaje en el contexto educativo.* Editorial Digital del Tecnológico de Monterrey.

Huambachano, A., y Huaire, E. (2018). Desarrollo de habilidades sociales en contextos universitarios. *Horizonte de la ciencia*, 8(14), 123–130. https://revistas.uncp.edu.pe/index.php/horizontedelaciencia/article/view/300

Kolb, D. (2014). *Aprendizaje experiencial: La experiencia como fuente de aprendizaje y desarrollo.* Pearson Educación de México, C.A. de C.V.

Macazana, M., Sito, L., y Romero, A. (2021). *Psicología educativa.* NSIA Publishigh House Editons.

Mejía, G., y Londoño, C. (2021). Las Relaciones Interpersonales en Contextos Educativos Diversos: estudio de casos. *Revista Perspectivas*, 6(21), 25-40. https://revistas.uniminuto.edu/index.php/Pers/article/view/2456

Ojeda, N. (2022). *Estrategias, recursos instruccionales y producción de medios (ERIPROM).* 2da. Edición. Fondo Editorial de la Universidad Pedagógica Experimental Libertador (FEDUPEL).

Olvera., Y. Domínguez., B, y Cruz., A. (2000). *Inteligencia emocional.* Plaza y Valdes.

Palella, S., y Martins, F. (2017). Metodología de la investigación cuantitativa. 4ª edición. Fondo Editorial de la Universidad Pedagógica Experimental Libertador (FEDUPEL)

Pincay-Aguilar, I., Candelario-Suarez, G., y Castro-Guevara, J. (2018). Inteligencia emocional en el desempeño docente. Psicología Unemi, 2(2), 32-40. DOI: https://doi.org/10.29076/issn.2602-8379vol2iss2.2018pp32-40p

Rodríguez, L. (2020). Estilos de aprendizaje basados en la teoría de Kolb predominantes en los universitarios. Revista Científica Internacional, 3(1), 81–88. https://doi.org/10.46734/revcientifica.v3i1.22

Romero, B. (2022). Competencias interpersonales de la inteligencia emocional. Caso: Complejo Petroquímico. Revista Digital de Investigación y Postgrado, 3(6), 61-70. https://redip.iesip.edu.ve/ojs/index.php/redip/article/view/56/64

Romero, S., Hernández, I., Barrera, R., y Mendoza, A. (2022). Inteligencia emocional y desempeño académico en el área de las matemáticas durante la pandemia. Revista De Ciencias Sociales, 28(2), 110-121. https://doi.org/10.31876/rcs.v28i2.37929

Sabino, C. (2014). El proceso de investigación. 10ma. Edición. Episteme.

Silva, A. (2018). Conceptualización de los Modelos de Estilos de Aprendizaje. Revista De Estilos De Aprendizaje, 11(21). https://doi.org/10.55777/rea.v11i21.1088

Suárez, I., Varguillas, C., y Roncero, C. (2022). Técnicas e instrumentos de investigación: Diseño y validación desde la perspectiva cuantitativa. Fondo Editorial de la Universidad Pedagógica Experimental Libertador (FEDUPEL).

Segura, J., Cacheiro, M., y Domínguez, M. (2018). Estilos de aprendizaje e inteligencia emocional de estudiantes venezolanos en educación media general y tecnológica. Areté: Revista Digital del Doctorado en Educación de la Universidad Central de Venezuela, 4(8), 37-60. http://saber.ucv.ve/ojs/index.php/rev_arete/article/view/15793

Tacca, D., Tacca, A., y Cuarez, R. (2020). Inteligencia emocional del docente y satisfacción académica del estudiante universitario. Revista Digital de Investigación en Docencia Universitaria, 14(1).http://dx.doi.org/10.19083/ridu.2020.887

Tripodoro, V y De Simone, G. (2015). Nuevos paradigmas en la educación universitaria: Los estilos de aprendizaje de David Kolb. Medicina (B. Aires). 75(2), 109-112. http://www.scielo.org.ar/scielo.php?script=sci_arttext&pid=S0025-76802015000200010

Waissbluth, M. (2019). Educación para el siglo XXI: El desafío latinoamericano. Fondo de Cultura económica.

Review Articles

Doctoral research: narrative, an intellectual elaboration nuanced by interdisciplinarity and complexity

La investigación doctoral: la narrativa una elaboración intelectiva matizada por la interdisciplinariedad y la complejidad

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Abstract

The narrative that emerges from the development of a doctoral research, currently has to be pergeñada of aspects such as interdisciplinarity and complexity. In addition, the importance of multiperspectivity and multicontextuality must be understood. In view of this preceding criterion, the intention of this discourse is to reflect on how the researcher should transform the writing process when reporting findings, based on the approach to the cognizable object. The essay is based on the examination of valuable literature, combined with documentary research, as well as the cogitations and maxims of the personal experiences of the person carrying out this intellectual discourse. As a provisional truth: we aspire to continue in this line of thought to deepen the need to transform the feelthinking of doctoral thesis researchers, tutors (or thesis directors) and jurors, referees or members of a doctoral tribunal.

Keywords: narrative, doctoral research, complexity, interdisciplinarity, multi-perspectivity, multi-contextuality.

Resumen

La narrativa que surge del desarrollo de una investigación doctoral, en la actualidad ha de estar pergeñada de aspectos como la interdisciplinariedad y la complejidad. Aunado a ello, comprender la importancia de la multiperspectividad y la multicontextualidad. En atención a este criterio precedente, la intencionalidad de este discurrir es la de reflexionar acerca cómo debe haber una transformación del proceso escritural por parte del investigador cuando reporte los hallazgos, a partir del acercamiento al objeto cognoscible. La disertación realizada se ha fundamentado en la revisión de literatura valiosa, con lo cual se asocia a la investigación documental; así como las cogitaciones y máximas de experiencias personales de quien realiza este discurso intelectivo. Como verdad provisional: se aspira a seguir en esta línea de pensamiento para profundizar sobre la necesidad de transformar el sentipensar de los investigadores de tesis doctorales, de los tutores (o directores de tesis) y de los jurados, árbitros o integrantes de un tribunal doctoral.

Palabras clave: narrativa, investigación doctoral, complejidad, interdisciplinariedad, multiperspectividad, multicontextualidad.

Preamble

Facing the writing of a doctoral research report often becomes complex and acquires a certain degree of difficulty. This can be due to several issues, ranging from epistemological simplism, linguistic denotation derived from the limited non-visual information contained in the hippocampus, to a limited command of writing skills. Regarding this latter aspect, the difficulty is expressed in a lack of attention to syntax and paragraph development; therefore, ideas are presented without considering coherence, cohesion, and linkage. Moreover, externally, one is subject to the prevailing academic dictatorship, either from advisors (thesis directors) or examination committees (doctoral tribunal members), who are seen as icons of intellectualism, and whose ideas must be accepted ad litteram. Hence, they do not allow for the construction of creative discourse.

Such considerations lead to the development of a doctoral thesis with limited vocabulary, very precise, quite denotative, and without promoting *ποίησις (poiesis)* as the impulse of connotative language, emerging from a lexical domain based on conscious and deeply reflected readings. Its content must be understood and internalized in a way that enables the researcher to write fluently. Therefore, in this discourse, we aim to delve into aspects related to the elaboration of a doctoral thesis. These aspects include: what is to be understood by research; the transition from disciplinarity to interdisciplinarity. Likewise, we have considered multiperspectivity and multicontextuality as dimensions that allow for a richer understanding of all communicational acts.

We cannot overlook complexity, whose foundational criterion is interdisciplinarity. And, based on that consideration, the narrative will acquire deeper nuances and cognitive richness that will turn the characterization of findings into high-quality poetic prose. Finally, it is hoped that those who engage in research can delve into this academic discourse to transform their way of feeling and thinking, and thus, leave their mark on the discourse leading to the formality of presenting a brilliant doctoral narrative.

The research in doctoral theses

The investigative processes in the construction of knowledge in doctoral theses require different approaches, scrutinous attitudes, and new holographic perspectives that lead the researcher to establish connectivity at various levels: macro, meso, and micro, through a discourse that emerges from encountering the phenomenal. All of this must be grounded in the intelligibility and understanding that these levels must be perfectly cohesive; therefore, each of them reveals, shines, and sparkles with an intellectual act, imbued with complexity due to the interrelation with other levels, elements, and facets that are part of the phenomenon under study.

In the phenomenal realm, as argued by Bonil *et al.* (2004: 5):

> Numerous elements converge, and multiple and varied interactions occur in processes where dynamism is constant. A world in which the interaction between social and natural perspectives has given rise to a model of social organization that reflects a profound crisis[1].

This perspective of relational multiplicity encourages the researcher to find other narratives that support their discourse after conducting the inquiry and presenting it with a scientific approach but with an innovative tone or nuance.

To delve into this intellectual act, let's start with the definition of research, which might be considered commonplace. However, it is valued as relevant, appropriate, in short: necessary. In this context, researching is a term that can be described as polysemic. Its first association can be traced back to the Latin term "*vestigium*" which, according to the *Etimologías de Chile* (2023: 1),

[1] Our translation: Numerous elements converge, and multiple and varied interactions occur in processes where dynamism is constant. A world in which the interaction between social and natural perspectives has given rise to a model of social organization that reflects a profound crisis.

"...se refería a la planta o suela del pie, [vale indicar, se vinculaba] con la marca que dejaba el pie en la tierra y después a la indicación de que alguien había caminado por allí"[2]. Translatively, it can be said that from this origin emerges the expression "*investigare*" This Latin verb, as explained by Ander-Egg (1995: 57), *"...proviene del latín in (en) y vestigare (hallar, inquirir, indagar, seguir vestigios) lo que conduce al concepto más elemental de descubrir o averiguar alguna cosa, seguir la huella de algo, explorar"*[3]. From this eidetic association, the concept of discovery and exploration can be extracted, using it to refer to the act of research.

With support from the aforementioned, it can be asserted, following Ander-Egg (1995:57), that when it comes to defining the scope of this term, it can be indicated that, regarding its applicability, it will be found in a sphere, in a context, or an "ambit" with plural actions and practices that can be carried out *"...desde [las actividades que ejecuta] el detective [hasta el acto que realiza] el científico"*[4]. The spectrum of use for the expression "investigar" is broad. In consistency with this discursive intellectual act, the referentiality is situated in the realm of scientific research. That is, in the specific case of reflection, it pertains to the act of crafting a doctoral thesis.

In light of these considerations, delving into this act—the inquiry or investigation—it can be said that it tends to be regarded as a process or a procedure. Under the consideration of a procedure, Ander-Egg (1992: 57) states:

> *...la investigación es un procedimiento reflexivo, sistemático, controlado y crítico que tiene por finalidad descubrir o interpretar los hechos y fenómenos, relaciones y leyes de un determinado ámbito de la realidad; [es] una búsqueda de hechos, un camino para conocer la realidad, un procedimiento para conocer verdades parciales, -o mejor-, para descubrir no falsedades parciales*[5].

Reflexivity and systematicity are evident, guiding the researcher in the hermeneutic act of findings related to the object of knowledge. Based on this hermeneutics conducted by the researcher, supported by the prolific literature found, they will proceed to reveal, through a exquisitely structured dialogue, the explanatory understanding or the comprehensive explanation of the phenomenon that has been part of the object of knowledge. In doing so, the cognizant subject approaches this knowable object to explain it, comprehend it, and even transform it.

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[2] Our translation: .. Initially referred to the plant or sole of the foot, indicating the mark left by the foot on the ground and later evolving into the indication that someone had walked there.

[3] Our translation: ..comes from the Latin in (in) and *vestigare* (to find, inquire, investigate, follow traces), leading to the most basic concept of discovering or finding something, following the trace of something, exploring."

[4] Our translation: from the activities performed by the detective to the act performed by the scientist.

[5] Our translation: ...research is a reflective, systematic, controlled, and critical procedure aimed at discovering or interpreting facts and phenomena, relationships and laws within a specific domain of reality; [it is] a quest for facts, a pathway to understand reality, a method to uncover partial truths—or rather—to discover not partial falsehoods.

The reflexivity and systematicity that should assist the researcher in the hermeneutic act of findings related to the object of knowledge are evident. Based on this hermeneutics conducted by the researcher, supported by the prolific literature found, they will proceed to reveal, through an exquisitely structured dialogue, the explanatory understanding or comprehensive explanation of the phenomenon that has been part of the object of knowledge. This occurs as the cognizant subject approaches this knowable object to explain it, comprehend it, and even transform it.

Under this guidance, as expressed by Grajales (2000: 2):

> *...el investigador debe aportar un alto sentido de orden, constancia y cuidado meticuloso propio de aquellos que han desarrollado un alto grado de responsabilidad. La honestidad es un valor indispensable en la verdadera investigación dado el esfuerzo y sacrificio que representa la búsqueda de la verdad y la constante oportunidad para descuidar los detalles*[6].

Within the discourse of writing, it is necessary, then, to take the preceding statement as a basis to record the responsibility that a doctoral thesis researcher has in establishing an order to articulate their scientific feelings and thoughts. As Contreras (2023: 27) maintains:

> *La investigación, en ciertos niveles académicos, debe trascender lo convencional y el sencillo acto de revelar los hallazgos. La narrativa científica debe estar matizada de complejidad; además, ha de estar guiada por un sintagma problematizador, un sintagma teleológico y un sintagma ontológico-epistemológico; ellos imbrican una arquitectura transmetódica y compleja para el descubrimiento del saber*[7].

This preceding criterion could be expanded with the assertion focused on it being the realization of the research; that is: its scientific report, which must go beyond merely denotative and simplifying discourse to delve into the facets of a deeper discourse. A story, a narrative, an appreciative stance that can and should be imbued with ποίησις (poiesis): creation, creativity, a different way of doing, a poetry. Poetry is creation. Platón (2016: 34) concurs: "'*Poesía*', *en efecto, se llama tan solo a ésta, y a los que poseen esa porción de 'creación', 'poetas'*"[8]. So, the researcher,

[6] Our translation: ...the researcher must bring a high sense of order, perseverance, and meticulous care, characteristic of those who have developed a high degree of responsibility. Honesty is an indispensable value in true research, given the effort and sacrifice that the pursuit of truth represents and the constant opportunity to overlook details.

[7] Our translation: At certain academic levels, research must transcend the conventional and the simple act of revealing findings. Scientific narrative should be nuanced with complexity; moreover, it should be guided by a problematizing syntagma, a teleological syntagma, and an ontological-epistemological syntagma. These elements interweave a transmethodic and complex architecture for the discovery of knowledge.

[8] Our translation: ...'Poetry,' indeed, is the name given only to this, and to those who possess that portion of 'creation,' 'poets.'

in the expressive presentation of their thesis, must anchor themselves in creation. They can harness their imagination, creativity, and poetry.

Therefore, as *poiesis*, the doctoral thesis must be an intellectual act of transcendence, infused with creativity and originality, in which the immense responsibility of the researcher as a builder of their own knowledge must be present. This constructive act must encompass the nuances of being comprehensive, multiversal, transcontextual, and transcendent. The multiversal aspect should be understood not only from a philosophical perspective, as in this realm of knowledge, the multiversal tends to refer to a world that is valued as a world in need of purpose, design, or predictability but should also be grounded in physics and cosmology. The multiversal is thus linked to an imaginary, hypothetical group of all possible universes that exist, of which we are a part.

It is common to observe, in doctoral research, according to the maxims of experience, a journey through epistemic and gnoseological comfort; that is to say, through cognitive stability based on a reductionist, simplifying, and hypothesizing paradigm. As Balza (2020: 52) notes in the construction of knowledge related to the doctoral spectrum:

> *...[en] el pensamiento y praxis investigativa de nivel doctoral, en el campo de las Ciencias Sociales, pareciera (...) [que se navega] en la corriente de lo simple, pues, muchas veces se ahoga en el análisis de lo efímero y se alindera en el determinismo y reduccionismo del pensamiento único; el cual, a su vez, empobrece al mínimo toda realidad y toda idea nueva e iniciativa del investigador*[9].

Many times, furthermore, the researcher in training often follows the intentionality and criteria of their guide rather than their own eidetic formulation, thereby accentuating the academic dictatorship centered on a methodology typical of inductivism/deductivism. That is why, in the face of new epistemological, gnoseological, and methodological realities that allow for a different approach to the phenomenon, to the quest for an explanation or understanding of the knowledge gap, it becomes necessary to embrace the onto-implicating doubt (Balza, 2020) - perhaps it sounds daring, but I will call it "onto-guiding doubt" - as this doubt becomes the fundamental support for discerning knowledge and guiding its construction, development, and realization in a doctoral thesis.

And, as Contreras (2017: 1) affirms: *El desarrollo de una tesis doctoral, muchas veces, en cuanto reto intelectivo, que concita reflexión, lectura, relectura, escritura y reescritura constante, se ha tornado en acto agobiante y de preocupación, a veces frustrante, para los participantes e inves-*

[9] Our translation: The development of a doctoral thesis, often seen as an intellectual challenge that involves reflection, reading, rereading, constant writing, and rewriting, has become a burdensome and worrisome task, sometimes frustrating, for participants and novice researchers.

tigadores noveles"[10]. This is why it becomes necessary to understand and confront new writing challenges and new ways of complexifying the narrative in doctoral theses, based on constant reading and thoughtful reflection on what it means to craft the report of a doctoral research.

As a corollary to this section, it can be indicated that the development of a doctoral thesis, after having gone through the process of approaching the knowable object, is an intellectual action that must be nuanced by feelings, emotionality, and mastery of discourse. This discourse will be grounded in the multiple readings undertaken by the researcher, allowing them to possess non-visual information (Smith, 1989) that propels an interesting creative act. This information stored in the hippocampus is what will guide and facilitate the composition of a distinct, novel, and impactful narrative.

In this context, doctoral research and the narrative that must unfold should be grounded in valuing the holistic nature of the phenomenon and, consequently, delving into interdisciplinary aspects and the complex thought-feeling derivations of the researcher. That is to say, if we think and feel in a complex manner, our object of knowledge or knowable object, presented to us as cognizant subjects, as researchers, as knowledge builders, will reflect that complexity rather than being mere social reproducers of knowledge.

Disciplinarity and Interdisciplinarity

An assumption that the researcher, positioned as a creator of novel and unprecedented knowledge, must consider is the appreciation of aspects such as disciplinarity, interdisciplinarity, multidisciplinarity, and, why not, an exploration of criteria for transdisciplinarity. These guiding principles are relevant today as doctoral studies are being conducted in various fields, based on the Sciences of Education and other disciplines, where the researcher associates their object of knowledge. Disciplinarity and interdisciplinarity are closely linked to multiperspectivity and multicontextuality, dimensions that will be briefly discussed below.

It is worth noting that, until now, the constructive idea of knowledge by researchers has focused on presenting the specificity of the object of knowledge, grounded in the fragmentation of knowledge in each discipline. Each segment explains, understands, and transforms its source of knowledge. This is disciplinarity. As Duque (2000: 7) expresses: *"Se llama paradigma disciplinar aquel en donde el conocimiento científico se organiza por disciplinas, las cuales establecen la división y especialización del trabajo, de acuerdo con los diversos campos de las ciencias"*[11]. In other

[10] Our translation: ...[in] the thought and investigative praxis at the doctoral level, in the field of Social Sciences, it seems (...) [that one navigates] in the current of simplicity, as it often drowns in the analysis of the ephemeral and aligns itself with the determinism and reductionism of singular thinking; which, in turn, diminishes to the minimum every reality and every new idea and initiative of the researcher.

[11] Our translation: The disciplinary paradigm is called such when scientific knowledge is organized by disciplines, which establish the division and specialization of work according to various fields of the sciences.

words, the autonomy of each science exists and is recognized; hence, the production of scientific knowledge about its own true knowable object. However, it is necessary to transcend this autonomy, without considering it as a loss of disciplinary autonomy. Rather, it should be viewed as an interrelation, aiming for a better understanding of the phenomenon under investigation.

This disciplinarity leads the researcher to develop and foster the conviction to delve deeper day by day and with greater proficiency into the object of knowledge within their field of study. While taking this step is important and sometimes necessary for achieving a profound mastery of disciplinary knowledge, it can "*...llevar consigo un riesgo de hiperespecialización del investigador y un riesgo de 'cosificación' del objeto estudiado olvidando que tal objeto es una construcción. El objeto de la disciplina será entonces percibido como una cosa en sí*"[12] (Duque, 2000: 8). And, as a master of disciplinary knowledge, it may also lead to having extensive and profound knowledge about the object of study but very little about other fields. The axiom is embraced: "knows a lot about very little." This may also imply having an ocean of knowledge with only an inch of depth. And that needs to be overcome.

Therefore, in the face of this evident and imminent objectifying act of the studied phenomenon, it becomes appropriate to move towards interdisciplinarity, which becomes the founding point of complexity. The objectification leads to a symbolic reworking of what thinking beings do with their materiality. And in this intentionality, one can reach a *"conciencia cosificada o cósica"*[13] (Sierra, 2007: 3).

And as Sierra himself clearly states (2007: 3):

> *La conciencia cósica o cosificada se presenta de dos modos. Por un lado, la reconstrucción que los sujetos hacen del mundo social la realizan como si se tratase de objetos independientes de sus acciones, como si éstos no estuviesen ligados a los primeros sino como si tuviesen existencia propia. Por otro lado, esta conciencia atribuye a los objetos sociales existencia independiente, no los puede concebir como inscritos en el devenir histórico social, sino que los supone provistos de esencialidades atemporales. [Itálicas en el original]*[14].

[12] Our translation: ...carry with it the risk of hyper-specialization for the researcher and a risk of 'objectification' of the studied object, forgetting that such an object is a construct. The object of the discipline will then be perceived as a thing in itself.

[13] Our translation: objectified consciousness

[14] Our translation: Objectified or object-consciousness presents itself in two ways. On one hand, the reconstruction that individuals make of the social world is done as if it were composed of objects independent of their actions, as if these were not connected to the individuals but as if they had their own existence. On the other hand, this consciousness attributes independent existence to social objects, it cannot conceive them as inscribed in the social-historical process but assumes them to be endowed with timeless essentialities. [Italics in the original]

Therefore, to transcend that act of "objectified consciousness," it becomes necessary to delve into interdisciplinarity as the foundation for scientific progress, as a founding criterion, and as a emphatic support of complexity. Regarding interdisciplinarity, Pérez & Setién (2008: 1), they argue that: *[Ella] constituye uno de los aspectos esenciales en el desarrollo científico actual. No se concibe la explicación de los problemas sociales desde una concepción científica sin la interacción de las disciplinas afines"*[15]. And on this foundation, concerning education, a taxonomy has been created called Educational Sciences (Mialaret, 1985). Through them, in interrelation, another way of narrating what has been found during the approach to the phenomenon of knowledge can be conceived, in a more comprehensive manner.

> In line with this, it is relevant to present the appreciation of Klaassen, Kothuis & Slinger (2021: 79-80), who have noted the following:Interdisciplinarity can be understood as combining two or more disciplines at the level of theory, methods, or solution space, to form a transcendent and innovative understanding or solution, that in turn can possibly transform the mono-discipline(s) (Repko, 2007; Menken & Keestra, 2016; Fortuin, 2015). Two interdisciplinary ways of working can be distinguished, namely: within a team of experts with different disciplinary backgrounds, or an individual using the theory, methods and solutions from disciplines other than their area of expertise in seeking an answer to their research or design questions.

As can be read, the idea of interrelation between two or more disciplines is rightly pointed out, but also when professionals with expertise in different disciplines interact. However, as can be anticipated, it can be an individual, a researcher, or an expert who applies propositions, theories, procedures, and solution responses from other disciplines to address a situation regarding the phenomenon being questioned.

Regarding this perspective of interdisciplinarity, it is prudent and relevant to understand, as stated by Nicolescu (2003, as cited in Balza, 2020: 56), that it is related to the: *"...transferencia de métodos de una disciplina a otra y se puede distinguir por su grado de aplicación, fundaentos epistemológicos y de concepción de nuevas disciplinas"*[16]. And, in line with this, Balza himself (2020: 60) states: *"Esta visión de interdisciplinariedad adquiere esa categoría, sólo cuando se genera un nuevo conocimiento proveniente de una transferencia de métodos, técnicas, teorías y procedimientos"*[17]. With research under the interdisciplinary criterion, it is possible and necessary to achieve an interrelation between the various disciplines of knowledge, allowing a regrouping of these knowledges.

[15] Our translation: It] constitutes one of the essential aspects in current scientific development. The explanation of social issues from a scientific perspective is inconceivable without the interaction of related disciplines.

[16] Our translation: ...transfer of methods from one discipline to another and can be distinguished by its degree of application, epistemological foundations, and the conception of new disciplines.[1]

[17] Our translation: "This view of interdisciplinarity attains that category only when new knowledge is generated from a transfer of methods, techniques, theories, and procedures.

In this direction, Pérez & Setién (2008: 1) express:

> *la reagrupación de los saberes. En la ciencia moderna, la preocupación de sus principales exponentes —Galileo, Descartes, Bacon— por la sociedad científica interdisciplinaria fue invariable. La diferencia radica sólo en que añadieron a esta agrupación interdisciplinar la necesidad de una comunicación entre las disciplinas, elemento que retoma la interdisciplinariedad a mediados del siglo XX. Fueron exponentes de estas ideas: Gottfried Wilhelm Von Leibnitz y Jean Amos Komenski (Comenio). Este último propuso la pansophia, como pedagogía de la unidad, capaz de eliminar la fragmentación del saber de las disciplinas*[18].

So, regarding interdisciplinarity, it is also worth noting that various attempts have been made to grasp and apprehend the dynamism involved in approaching interdisciplinary activity. As Peñuela aptly points out (2005: 49):

> *...se pueden encontrar dos lógicas básicas de constitución: una que usa la palabra interdisciplinariedad como eje central acompañada de un adjetivo que da cuenta del aspecto a resaltar (cuando se logra especificar), entre las que están: interdisciplinariedad lineal, estructural, heterogénea, auxiliar, compuesta, complementaria, unificadora, cruzada, isomórfica, paralela, temática, metodológica, por método, por teoría, por regla, por objeto. Y otra, que se construye con base en prefijos (raíces griegas y latinas) y en una jerarquía que busca medir el nivel de interacción alcanzado. En esta encontramos: multidisciplinariedad (multi–D), polidisciplinariedad (poli–D), pluridisciplinariedad (pluri–D), transdis*Thus, in line with cognitive action, from and with an interdisciplinary perspective, semiotics must be transformed, guided by a framing, structuring framework, to tend towards a deconstruction - a method developed by Derrida in 1960, as cited in Encyclopaedia Britannica, 2022: 1), which was defined as:*ciplinariedad (trans–D) y metadisciplinariedad (meta–D), entre otras opciones posibles*[19].

[18] Our translation: Interdisciplinarity is nothing more than the epistemological reaffirmation and constant regrouping of knowledge. In modern science, the concern of its main proponents—Galileo, Descartes, Bacon—for interdisciplinary scientific society was unwavering. The difference lies only in that they added to this interdisciplinary grouping the necessity of communication between disciplines, an element that interdisciplinarity reintroduced in the mid-20th century. Advocates of these ideas included Gottfried Wilhelm Von Leibnitz and Jean Amos Komenski (Comenius). The latter proposed pansophia as a pedagogy of unity, capable of eliminating the fragmentation of knowledge across disciplines.

[19] Our translation: ...two basic logics of constitution can be found: one that uses the word interdisciplinarity as the central axis accompanied by an adjective that accounts for the aspect to highlight (when it can be specified), including: linear interdisciplinarity, structural interdisciplinarity, heterogeneous interdisciplinarity, auxiliary interdisciplinarity, composite interdisciplinarity, complementary interdisciplinarity, unifying interdisciplinarity, cross-disciplinarity, isomorphic interdisciplinarity, parallel interdisciplinarity, thematic interdisciplinarity, methodological interdisciplinarity, method-based interdisciplinarity, theory-based interdisciplinarity, rule-based interdisciplinarity, object-based interdisciplinarity. The other logic is constructed based on prefixes (Greek and Latin roots) and a hierarchy that seeks to measure the level of interaction achieved. In this category, we find: multidisciplinarity (multi-D), polydisciplinarity (poly-D), pluridisciplinarity (pluri-D), transdisciplinarity (trans-D), and metadisciplinarity (meta-D), among other possible options.

From what has been explained, one can infer about the plurality of approaches that are linked, in principle, to the disciplinary. Now, the approach and cognitive elaboration, from interdisciplinarity, are based on the methodological conjunction of the different disciplines involved in said elaboration, so it is necessary to delve into a contemplation that is not absorbed, but reflective from and with the transdisciplinarity of the object of knowledge. This dilettante reflexivity involves taking on a progressive and perfecting commitment to all the limitations bordering on the curtailment of human thought-feeling (Balza, 2020). This thought-feeling must be strengthened through emerging epistemologies such as transdisciplinarity and complexity. And this is the focal point of this cognitive discourse: the trans-D (transdisciplinarity).

So then, consistent with the cognitive process, from and with an interdisciplinary perspective, semiotics must be transformed, guided by a framing, structuring framework, to tend towards a deconstruction - a method developed by Derrida in 1960, as cited in Encyclopaedia Britannica, 2022: 1), which was defined as: "...[a] form of philosophical and literary analysis"; furthermore, with interdisciplinarity - and with the possibility of being grounded in transdisciplinarity - the resolution of dilemmas that transcends reasoning must be positioned. This reasoning, which until now has relied on a premise containing a choice between two terms, while other premises indicate that both cases of the choice lead to the same conclusive outcome, must be overcome with a foundational transdisciplinary epistemology.

The language used to translate the knowledge and theory achieved, to be shared through a doctoral thesis, must go beyond denotation to be presented connotatively. It must aim to create an instructive and illustrative lexicon that redefines and resemantizes the existing. It must draw on interdisciplinary support from linguistics, philosophy, pedagogy, semiotics, among others, to achieve this transcendent discourse. Thus, it will draw from semiotics, semantics, lexicography, grammar, syntax, relational syntagms, free syntagms, and phraseological units, among many others. This requires a significant and necessary linguistic proficiency on the part of the doctoral researcher, enabling them to break free from the shackles of intellectual constraints and ensure a new way of communicating knowledge.

So then, as a creative drive in the art of writing to disseminate the knowledge that has been created, it must be envisioned with an interdisciplinary perspective. In this way, progress is made in science, as Morin (1984, as cited in Peñuela, 2005: 65) states:): *"La ciencia nunca hubiera sido la ciencia..."*[20]. Therefore, in the construction of knowledge, and thus science, interdisciplinarity resembles an option, an epistemology that allows every researcher to interweave and correlate existing disciplines and their corresponding methods of approaching their respective objects of knowledge.

For this reason, the researcher must be creative, a dreamer, to challenge preconceived frameworks. With this argumentative foundation, the need to modify the anchors and schemes that

[20] Our translation: The science would have never been the science...

currently exist in doctoral research should be addressed. This research has a constructive teleology aiming for disruptive and transformative knowledge. This must be the case, as considerations must be taken into account *"...las interconexiones en el sentido del complexus de los fenómenos"*[21] (Balza, 2020: 63).

In that interconnectedness established in the phenomena, various integrative dimensions of objects of knowledge can be appreciated. This is how you can find:

> *...ciertas dimensiones, "niveles de realidad" (Nicolescu, 1996), que exigen una actitud diferente, un encuentro con la fractalidad, "una oscilación entre la práctica teorizada y la teoría practicada" (Ramírez, 1999b), una dialéctica fractal (Ramírez, 1999c) o partir de una "lógica arborescente", o lógica sinfónica (Morin, 1984). (Como fueron citaron en Peñuela, 2005: 68)*[22].

In that orientation, considered as they should be, the multiple interconnections when it comes to knowledge crafted from a doctoral research, such construction *"...nos permite un tránsito mental y un despliegue argumental para la resemantización de nuevos campos de conocimiento en absoluta libertad de pensamiento; es decir, sin resistencias epistemológicas, conceptuales y lingüísticas"*[23] (Balza, 2020: 64).

And this premise that stands as the foundation to advance in science, hence, in understanding knowledge, from that doctoral research perspective, reflects a deconstructive action of preconceived schemes.

According to Balza (2020: 66), this scientific progress:

> *...supone deconstruir el conocimiento preexistente relacionado con las temáticas consideradas, tal y como lo plantea González (2007), cuando deja ver, que una tesis doctoral debe ir más allá de los marcos teóricos analizados; en tanto, el desafío para el tesista es ampliar los límites teóricos aceptados hasta el momento*[24].

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[21] Our translation:...the interconnections in the sense of the *complexus* of phenomena.

[22] Our translation: ...certain dimensions, 'levels of reality' (Nicolescu, 1996), that demand a different attitude, an encounter with fractality, 'an oscillation between theorized practice and practiced theory' (Ramírez, 1999b), a fractal dialectic (Ramírez, 1999c) or starting from an 'arborescent logic' or symphonic logic (Morin, 1984). (As cited in Peñuela, 2005: 68).

[23] Our translation: ...enables a mental journey and an argumentative deployment for the resemantization of new fields of knowledge in absolute freedom of thought; that is, without epistemological, conceptual, and linguistic resistances.

[24] Our translation: ...entails deconstructing preexisting knowledge related to the considered themes, as stated by González (2007), when he suggests that a doctoral thesis must go beyond the analyzed theoretical frameworks; the challenge for the thesis writer is to expand the accepted theoretical boundaries up to that point.

Undoubtedly, in this plural thematic discourse, dialectics emerges as a rational necessity for the development of doctoral research, which unquestionably must be imbued, lacquered, characterized by interdisciplinarity, hence, complexity. Methodological simplism does not entail the ontoepistemological substrate that exudes the argumentative wisdom founded on making connections in all dimensions of the phenomenon. Through dialectics, questions are formulated and answers are obtained, which, in turn, provoke new questions. In this way, it is necessary to *"...entender que se está trabajando con construcciones que trascienden lo disciplinar"*[25] (Peñuela, 2005: 73).

And when this criterion is internalized by the researcher, then a discernment of complementarity is being established. In this way, it advocates and relates to the comprehensive sense of valuing interconnected scientific knowledge based on the argumentative criteria, reflections, discernment, and judgments elaborated by each discipline.

In this regard, Balza (2020: 68) argues that:

> *...todo razonamiento y argumentación (...) necesariamente surge de la ontología disciplinar y de la concurrencia interdisciplinaria y multidisciplinaria, en tanto la visión de complementariedad traduce una concepción emergente de racionalidad científica que conduce a superar los límites de las realidades ingenuas desde nuestros pensamientos y de este modo ensanchar y enriquecer la ciencia*[26].

It is a formidable challenge for the academic and scientific community dedicated to building knowledge to transcend the archetypes and prevailing criteria of paradigms governed by simplicity and the denotative nature of language. The pristine idea should be to delve into the interstices of noumenal, phenomenal, noospheric, and hologogic reality, which, in principle, are uncertain, unknown, and advance into the paths of an intriguing, unknown, hallucinatory, and enlightening journey.

It is imperative to recognize the presence of a Supreme Being in our lives to access the intricacies of knowledge. For He, almighty, through the Holy Spirit, breathes His gifts of Wisdom, Intelligence, and Science into us to understand, explain, transform, and interpret human knowledge, which is immeasurable. Therefore, it must be acknowledged that knowledge is valuable but never separates us from God; hence, we must ask the Holy Spirit, -who invites us to experience great things-, to allow us to live in these constructive processes of interdisciplinary understanding in humility, fraternity, never in vanity and division.

[25] Our translation: ...understand that we are working with constructions that transcend disciplinary boundaries.

[26] Our translation: ...every reasoning and argumentation (...) necessarily arises from disciplinary ontology and interdisciplinary and multidisciplinary concurrence, as the vision of complementarity reflects an emerging conception of scientific rationality that leads to overcoming the limits of naive realities from our thoughts and thus expanding and enriching science.

Likewise, it is prudent, as a human being, to invoke humility so that we do not boast of things we do not possess, for it is just to recognize our limitations. Therefore, it is necessary and commendable to acknowledge our ignorance, just as Socrates did, who *"...se había dado cuenta de lo lejos que estaba de ser sabio, de que no sabía nada"*[27] (Popper, 2001: 1). The more we know or learn, the more we realize how little we know in the universe of science and how much we are ignorant of many, many things. Therefore, Popper (2001: 1) will say, *"...debemos hoy seguir construyendo nuestra filosofía del conocimiento sobre la tesis de nuestra falta de conocimiento, en defensa de la tolerancia, y de principios éticos"*[28]. These issues should be foundational in the elaboration of a doctoral research.

As a corollary of contingency and provisionality, I must present this reflection: the elaboration of knowledge today must be permeated by the emerging paradigms of interdisciplinarity and complexity. There must be an awareness of the impactful importance for science of knowledge produced through dialectics, even of trialectics or discursive polyangularity, to be truly substantive in scientific progress. Likewise, the generation of a theory must be grounded in new categories, new typologies, and conceptualizations that allow linguistically expressing the relational syntax in a different way. As Morin et al. rightly state (2002: 20): *"En la perspectiva compleja, la teoría está engranada, y el método, para ser puesto en funcionamiento, necesita estrategia, iniciativa, invención, arte. Se establece una relación recursiva entre método y teoría. El método, generado por la teoría, la regenera"*[29].

With regard to what must be considered as the theory emerging in a doctoral research as an intellectual action of great scope and depth. In this dissertation, I conceive theory as the categorical and notional elaborations that allow for explaining, understanding, interpreting, and resignifying the multirelationality, transparented in reality, whether noumenal, phenomenal, noospheric, or hologogic, through transtextuality, transdisciplinarity, and resemantization in the multiperspectivity that characterizes the complex and complexifying thinking of the cognizant subject: the researcher.

It is imperative - as a digression - to clarify the term 'hologogic'; its semiotic ascription is found in hologogy. According to Barrera (2013: 1), he expresses:

[27] Our translation: ...realized how far he was from being wise, that he knew nothing".

[28] Our translation: ...today we must continue to build our philosophy of knowledge on the thesis of our lack of knowledge, in defense of tolerance and ethical principles.

[29] Our translation: In the complex perspective, theory is interconnected, and the method, to be operationalized, requires strategy, initiative, invention, and art. A recursive relationship is established between method and theory. The method, generated by theory, regenerates it.

> *La hologogía corresponde a la comprensión del quehacer profesional y educativo vista como continuum, a partir de la concepción integral, holista del ser humano, en correspondencia con diversos aspectos existenciales a ser tenidos en cuenta, tales como la condición espaciotemporal, el sentido de la vida, la particularidad de cada quien, la universalidad de los propósitos humanos, los valores...*[30]

Having described the disciplinary and multidisciplinary aspects within the framework of communicating knowledge generated from the research on the cognizable object, it is now appropriate to delve into another element that must be part of the doctoral discourse in the realization of the investigative report. These are multiperspectivity and multicontextuality.

Multiperspectivity and Multicontextuality

It must be understood that the existence and presence of multiperspectivity and multicontextuality will transform the conventional construction of knowledge. A single perspective, a single path, reduces and limits a more enriched understanding of the investigated phenomenon. In this sense, it is necessary to overcome the axiom that one has profound expertise in a specific area of knowledge, to embrace the commitment and awareness of a plural, extensive knowledge achieved through the skilled study of interdisciplinarity. Otherwise, if the elaborative processes of knowledge construction are not reversed through doctoral research, we will continue to be social reproducers of knowledge; the presented content will always be a reflection of what others have elaborated, leaving prevailing epistemologies untouched.

In the present times, the term *"la multiperspectividad, como una forma de reconocimiento de las diferencias entre los distintos grupos humanos"*[31] (Souza, 2015: 88). Based on this eidetic premise, multiperspectivity can be understood as diverse representations aimed at a deep and complex recreation, providing multiple perspectives on the object of knowledge. This gives rise to different and complex narratives that can support the researcher in describing the knowledge constructed about the object of study, as manifested in the investigative report.

Therefore, in the investigative reports of doctoral theses, a multiperspectival narrative should be encouraged, as expressed by Fekete (2008:1):

[30] Our translation: Hologogy corresponds to the understanding of professional and educational activities seen as a continuum, based on the integral, holistic conception of the human being, in correspondence with various existential aspects to be taken into account, such as spatiotemporal condition, the meaning of life, individual uniqueness, the universality of human purposes, values...

[31] Our translation: multiperspectivity' is mentioned as a form of recognition of differences among various human groups.

> ...the relationship between narration and perspectivity, or rather the subjectivity of experiencing reality ("Subjektabhängigkeit von Wirklichkeitserfahrung") is especially clear in the case of multiperspectival narration, because in these narratives several versions of the same events are presented side by side, and thus in such multiperspectival narratives, the emphasis shifts from the narrated events to the mode of experiencing reality.

Multiperspectivity allows the researcher to consider the "*dimensiones relacionales, intersubjetivas y microsociales*"[32] of a specific and given phenomenon (Larkin *et al.* 2019: 183). Therefore, when the doctoral researcher has to craft the narrative of their investigation, materialized in the doctoral thesis, they must address and, moreover, explain the multiple relationships that have emerged in their approach to the cognizable object. These are the multiple perspectives that they must grasp, stemming from a reflection on the investigated phenomenon.

This multiperspectivity is linked to multicontextuality. And when crafting a narrative from multiplicity, undoubtedly, the counterpart of multiperspectivity must be kept in mind: multicontextuality. On one hand, multicontextuality involves accounting for the existence of an entity in various environments; that is, reference is made to different places. These can be situated in the physical, biological, cognitive, social, historical, linguistic realms, and this cannot be disregarded in the narrative of doctoral elaborations. On the other hand, a multicontextual view calls for developing an understanding that human beings also possess various perspectives, nuances, circumstances, or facets in their existence that can intersect and, at times, may appear assumed.

Therefore, from multicontextuality, the elaboration of the doctoral research report should provide guidance that explains all these circumstances surrounding the findings and the theory being presented. In this regard, what Ibarra expressed (as cited in Valle & Rodríguez, 2012: 8) becomes evident: "...explains that multicontextuality is an ability to think and function in multiple languages and literacies, contexts or cognitive styles, in order to respond to current trends in economic, civic, and personal spheres". So, it must be understood that the multicontextual is a mixture, an integration of diverse and varied contexts that interrelate cognitively to craft a narrative. These two dimensions must be present in the elaboration of a doctoral thesis. Consequently, the discursive vision of this creative act, based on research, will change.

Complexity: Prevalent Criterion in Doctoral Narrative

As an introduction to this aspect, I must mention that the researcher aspiring to obtain a doctoral degree must undoubtedly modify their cognitive approach to the ontological, epistemological, and methodological aspects regarding the knowledge gap of the studied phenomenon. This will serve as the basis for the construction of their subsequent narrative. So, the question arises: How to transcend methodical simplism and linear discursive construction in doctoral-level research?

[32] Our translation: dimensiones relacionales, intersubjetivas y microsociales"

Firstly, it must be stated that the researcher must detach and free themselves, according to (Balza, 2020: 55), from:

> *...una perspectiva epistemológica que obstruye y empobrece todo intento de razón plural y argumentación trascendente. [Dado que] (...) la mirada disciplinaria luce como una perspectiva epistemológica restringida e insuficiente para nutrir la ciencia de nuevos valores y poder disfrutar de sus riquezas, pues es un posicionamiento que ahoga los espacios de comprensión global y de reflexión profunda*[33].

So, by consciously, reflectively, and critically unlearning the reductionist patterns of paradigms and epistemologies that are untouchable, immovable – as intactness, inviolability does not allow the progress of the scientific status – then, one can have a different approach to knowledge about the knowable object. Regarding the ontology of the object of knowledge, it must be defined based on categorical pairs, in oppositum.

In line with this, Contreras (2017: 12) notes: *"Una ilustración de los pares categoriales (...) -sin que se tome como una formulación inalterable- [los cuales permitirán] realizar una precisión ontológica del objeto de estudio son los siguientes"*[34]*:*

It can also draw support from the categories developed by Immanuel Kant. The crucial aspect is that, based on this antipodal circumstance, the researcher can choose one category from each categorical pair and thus define the object of knowledge according to the selected category.

Categorical pairs *in oppositum*			
Simple / Complex	Abstract / Concrete	Finite / Infinite	Variable / Invariable
Real / Uneal (or ideal)	Dinámic /Static	Formal / Informal	Possible / Impossible
Permanent / Eventual	Continuous / Discontinuous	Singular / Plural	... / ...

A word of caution: the ontology of the object of knowledge should not be confused with the ontology of the research.

In this scenario, it will no longer be exclusively about the ontological reference of the object of knowledge or the object of research – I clarify that I make a distinction between these

[33] Our translation: ...an epistemological perspective that obstructs and impoverishes any attempt at plural reasoning and transcendent argumentation. [Given that] (...) the disciplinary view appears as a restricted and insufficient epistemological perspective to enrich science with new values and enjoy its riches, as it is a stance that stifles the spaces for global understanding and deep reflection.

[34] Our translation: An illustration of the categorical pairs (...)—without being taken as an unalterable formulation—[which will allow] for an ontological clarification of the object of study is as follows:

meanings regarding the object of study, a term of my own choice and convenience for undergraduate, specialization, and master's levels. Instead, cognitive exploration must focus its reflective point on the theoretical framework, where the *"interproblemáticas (...) [que han de ser explicadas, comprendidas, resignificadas, y de hacerse] desde la multiperspectividad de posibilidades paradigmáticas y epistemológicas para pensar libremente lo que se desea conocer"*[35] (Balza, 2020: 53).

That is the intellectual task of the researcher that must be applied, first in their approach to the object of knowledge, and second, in the narrative of their doctoral thesis. It must be, as mentioned above, part of the poiesis (of creation), through which they can paint on the cognitive canvas the theoretical formulation, the falsifiability of a theory, the theoretical comparability, the formalization of a theory, and, with an interdisciplinary - even transdisciplinary - and complex criterion, redefine, reinterpret, understand, and/or theoretically explain the phenomenon, the object of research.

In this perspective, one arrives at the construction of knowledge, with the emerging disruption of a theory. And, regarding this term, it must be taken into account that:

> *Una teoría no es el conocimiento, permite el conocimiento. Una teoría no es una llegada, es la posibilidad de una partida. Una teoría no es una solución, es la posibilidad de tratar un problema. Una teoría solo cumple su papel cognitivo, solo adquiere vida, con el pleno empleo de la actividad mental del sujeto (Morin et al. 2002: 20)*[36].

In the foregoing, the central and emphatic point is the appreciation seen in the development of a theory, which will allow the consolidation of knowledge about the object of the doctoral research. In this way, one will be thinking about having a different perspective on the methodology, which must allow for the reorientation and evaluation, from an interdisciplinary and complex standpoint, of the approach to the object of knowledge.

Therefore, it is fitting, timely, necessary, and quite significant to prioritize the criterion of underpinning all research."*...desde la multirreferencialidad y [desde] la interproblematicidad subyacente en el sintagma relacional (...) hacia una fusión de horizontes del conocimiento para el encuentro con lo transdisciplinario"*[37] (Balza, 2010, as quoted in Balza, 2020: 58), so as to allow for an explanatory/comprehensive or a comprehensive/explanatory approach, as well as a diatopic and ecosophic hermeneutics, of the phenomena that are part of the consciousness and interest of the researcher.

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[35] Our translation: interproblematics (...) [need to be explained, understood, redefined, and approached] from the multiperspectivity of paradigmatic and epistemological possibilities to freely think about what one wishes to know.

[36] Our translation: A theory is not knowledge; it enables knowledge. A theory is not a destination; it is the possibility of a departure. A theory is not a solution; it is the possibility of addressing a problem. A theory only fulfills its cognitive role, only comes to life, with the full engagement of the subject's mental activity (Morin et al. 2002: 20).

It is supported, reaffirmed, and underscored, then, *"...la teoría no es nada sin el método, la teoría casi se confunde con el método o más bien teoría y método son los dos componentes indispensables del conocimiento complejo"*[38] (Morin et al. 2002: 21). Therefore, the researcher must transcend methodological simplicity and linear discursive construction, which could characterize their doctoral research work, to navigate new paths, new epistemological and transontological horizons. This must be reshaped from and within a new transtheoretical, transtheorizing, and even transdisciplinary phenomenological reality, embracing interdisciplinarity. And it must be so because, in the current context: *"Definitivamente, vivimos atrapados en una cultura investigativa disciplinaria y monometódica para la construcción de la ciencia..."*[39] (A.M. Balza Laya, personal communication, in Transdisciplinary Brushstrokes, October 18, 2022).

With these premises, when it comes to a doctoral research, there must be a different intellectual reconfiguration. In this, the transformative vision and complex thinking that the thesis director (supervisor) possesses are important to support the ideas of the researcher aspiring to be a doctor. Therefore, as asserted by Balza (2020: 54):

> *...un candidato a doctor, o un doctor en formación debe ser un investigador permanente, un internauta, un crítico, un hermeneuta dialéctico para abordar (sic) la realidad; transitarla desde sus pensamientos y, de este modo, poder viajar de lo simple a lo complejo, de lo disciplinario a lo transdisciplinario, de la certeza a la incertidumbre; es decir, movilizarse desde la lógica científica formal hacia una nueva lógica cognitiva de naturaleza relacional y reconfiguracional*[40].

Without criticism, without the transformative vision of science, without adherence to dialectics as a discursive and reflective strategy, there will be no possibility of leaving the confines of a linear logic, -whose use is not dislocated-, but serves only as a drive to provoke the emergence of *"una nueva lógica cognitiva de naturaleza relacional y reconfiguracional"*[41] (Balza, 2020: 99). Therefore, a profound understanding of epistemological transformation and its respective methods must be developed. Morin et al. (2002: 26) will underscore: *"El método es también un ejercicio de resistencia espiritual organizada, que como quería Adorno, implica un ejercicio*

[37] Our translation: ...from the multireferentiality and the underlying interproblematicity in the relational phrasing (...) towards a fusion of knowledge horizons for the encounter with the transdisciplinary.

[38] Our translation: ...theory is nothing without method; theory almost merges with the method, or rather, theory and method are the two indispensable components of complex knowledge.

[39] Our translation: Definitely, we live trapped in a disciplinary and monothematic research culture for the construction of science...

[40] Our translation: A doctoral candidate, or a candidate in training for a doctorate, must be a permanent researcher, an explorer, a critic, a dialectical hermeneutic to approach reality; to traverse it from their thoughts and, in this way, be able to journey from the simple to the complex, from the disciplinary to the transdisciplinary, from certainty to uncertainty; that is, to move from formal scientific logic to a new cognitive logic of a relational and reconfigurational nature.

permanente contra la ceguera y el anquilosamiento generado por las convenciones y clichés acuñados por la organización social"[42].

In this approach, the idea of spiritual reconnection related to the method underlies, but it also needs to be linked with knowledge. In this regard, mention must be made of Bacon's thought (1625: 1), expressed as follows: "It is true that a little Philosophy inclineth man's mind to atheism; but depth in Philosophy bringeth men's minds about to Religion." Thus, the researcher should not forget one of the inherent characteristics of being human: the act of reconnecting. This connection or bond with a Supreme Being, whatever the denomination.

Therefore, researchers engaging in doctoral studies and all those who peer through the lattice of knowledge, using complex, interdisciplinary, and methodical dialectical processes, must have a disruptive epistemological vision to construct knowledge. In line with this, as Méndez proposes (2003, as cited in Balza, 2020: 99):

> *...el aspirante a doctor debe situarse en los limites explicativos, interpretativos o predictivos de las teorías, paradigmas, metodologías y campos disciplinarios existentes en torno al problema o problemáticas estudiadas, para que pueda superarlas generándose saltos cualitativos en el conocimiento científico*[43].

And with this perspective, the method must be appreciated as a support and as the work of an intelligent being that experiments with strategies, grounded in new epistemologies, so as to respond to the multiplicity of questions that are part of uncertainties. It must, therefore, free itself from rigidity, from being overly manual, and from established frameworks to comprehend and proceduralize it with a new perspective. There is, therefore, not a single way to understand uncertainty, and even less so if it is thought of as something programmatic.

> *En este sentido, reducir el método a programa es creer que existe una forma a priori para eliminar la incertidumbre. Método es, por (...) tanto, aquello que sirve para aprender y a la vez es aprendizaje. Es aquello que nos permite conocer el conocimiento. Por todo ello, como afirmaba Gaston Bachelard, todo discurso del método es un discurso de circunstancias. No existe un método fuera de las condiciones en las que se encuentra el sujeto*

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[41] Our translation: a new cognitive logic of relational and reconfigurational nature'.

[42] Our translation: The method is also an exercise in organized spiritual resistance, which, as Adorno desired, involves a continuous effort against the blindness and stagnation generated by the conventions and clichés coined by social organization."

[43] Our translation: The doctoral candidate must position themselves at the explanatory, interpretative, or predictive boundaries of existing theories, paradigms, methodologies, and disciplinary fields related to the studied problem or problems, in order to surpass them and generate qualitative leaps in scientific knowledge.

(Morin et al. 2002: 25)[44].

All of this, with the intentionality of a provisional and contingent thought, can be said to be convenient, timely, and necessary to transcend the simplicity in the use of a method and the linear discursive construction of research at the doctoral level. Therefore, to achieve this transcendence, science must be approached with an open, reflective mind and cognitive confrontation with and from the knowing subject. In this way, a disruptive epistemology can be embraced to conduct research that destabilizes the prevailing status in the execution of doctoral investigations. It becomes necessary to comprehend other relational, discursive, dialectical, complex, and transdisciplinary syntagms to break through with new discursive forms interwoven in linguistic polyangularity.

Finally, it is imperative to understand the development of a discourse characterized and supported by interdisciplinarity and complexity. This discourse should also integrate multiperspectivity and multicontextuality. Moreover, there should be a different assessment of the ontological, epistemological, and methodological aspects in line with the requirements of emerging epistemologies.

References

Ander-Egg, E. (1995). *Técnicas de investigación social.* (24a ed.). Buenos Aires: Lumen.

Bacon, F. (1625). *Essay 16: "Of Atheism"*. http://knarf.english.upenn.edu/EtAlia/bacon16.html

Balza, L. A. M. (2020). *Complejidad, transdisciplinariedad y transcomplejidad. Los caminos de la nueva ciencia*. Fondo Editorial Gremial. Asociación de Profesores Universidad Nacional Experimental "Simón Rodríguez" (APUNESR).

Barrera, M. M. F. (2013). *Qué es la hologogía.* https://marfibamo.blogspot.com/2013/12/que-es-la-hologogia.html

Bonil, J., Sanmartí, N., Tomás, C. and Pujol, R. (2004). Un nuevo marco para orientar respuestas a las dinámicas sociales: el paradigma de la complejidad. *Investigación en la escuela* Número 53, (pp. 5-19). 2004. https://idus.us.es/bitstream/handle/11441/60999/Un%20nuevo%20marco%20para%20orientar%20respuestas%20a%20las%20din%c3%a1micas%20sociales.%20el%20paradigma%20de%20la%20complejidad.pdf?sequence=1&isAllowed=y

Contreras, C. A. F. (2017). *Objeto de conocimiento en tesis del Doctorado de Pedagogía: Pers-*

[44] Our translation: En este sentido, reducir el método a programa es creer que existe una forma a priori para eliminar la incertidumbre. Método es, por (...) tanto, aquello que sirve para aprender y a la vez es aprendizaje. Es aquello que nos permite conocer el conocimiento. Por todo ello, como afirmaba Gaston Bachelard, todo discurso del método es un discurso de circunstancias. No existe un método fuera de las condiciones en las que se encuentra el sujeto (Morin, Ciurana y Motta, 2002: 25).

pectiva Onto-Epistémica. Su problematización. https://www.academia.edu/43980885/Objeto_de_Conocimiento_en_Tesis_del_Doctorado_de_Pedagog

Contreras, C. A. (2023). La fenomenología social de Alfred Schütz: un aporte desde mirad as complejas y transmetódicas de investigación. *Revista Digital de Investigación y Postgrado*, 4(8), 27-43. https://redip.iesip.edu.ve/ojs/index.php/redip/article/view/94

Duque, H. R. (2000). Disciplinariedad, interdisciplinariedad, transdisciplinariedad–Vínculos y límites–. *Semestre económico*, 4(7), pp. 1 -10. https://revistas.udem.edu.co/index.php/economico/article/view/1412/1544

Encyclopaedia Britannica (2022). *Deconstruction*. https://www.britannica.com/topic/deconstruction

Etimologías de Chile (2020). *Investigar*. https://etimologias.dechile.net/?investigar

Fekete, Z. J. (2008). Multiperspectival Narration: The Perspective Structure of Charles Dickens´ "Bleak House" and George Eliot´s "Middlemarch". [Tesis de Maestría, publicada]. https://www.grin.com/document/177667

Grajales, T. (2000). *El concepto de investigación*. https://brd.unid.edu.mx/recursos/Metodologia_de_la_Investigacion/MI07/Concepto_de_investigacion.pdf

Klaassen, R. Kothuis, B. & Slinger, J. (2001). Engineering roles in Building with Nature interdisciplinary design. Educational experiences. *Research in Urbanism Series*. 7, 73-98. https://rius.ac/index.php/rius/article/view/129

Larkin, M., Shaw, R. and Flowers, P. (2019). Multiperspectival designs and processes in interpretative phenomenological analysis research. *Qualitative Research in Psychology*. 16(2), 182–198. https://doi.org/10.1080/14780887.2018.1540655

Mialaret, G. (1085). *Introducción a las ciencias de la educacón*. Unesco

Morin, E., Ciurana, E. R. and Motta, R. D. (2002). *Educar en la era planetaria: el pensamiento complejo como método de aprendizaje en el error y la incertidumbre humana*. Serie: FILOSOFÍA, número 16. Salamanca: Gráficas Varona.

Peñuela, V. L. A. (2005). La transdisciplinariedad. Más allá de los conceptos, la dialéctica. En *Andamios*. Año 1, número 2, 43-77. https://www.scielo.org.mx/pdf/anda/v1n2/v1n2a3.pdf

Pérez, M. N. and Setién, Q. E. (2008). La interdisciplinariedad y la transdisciplinariedad en las ciencias: una mirada a la teoría bibliológico-informativa. ACIMED. *Revista Cubana de Información en Ciencias de la Salud*. 18(4). http://scielo.sld.cu/scielo.php?script= sci_arttext&pid=S1024-94352008001000003

Platón (2016). *El banquete*. https://www.textos.info/platon/el-banquete/pdf

Popper, K. (2001). El conocimiento de la ignorancia. *Polis* [En línea], 1. Publicado el 30 noviembre 2012. http://journals.openedition.org/polis/8267

Sierra, W. (2007). Cosificación: avatares de una categoría crítica. *Revista de Filosofía "Sophia"*, Quito-Ecuador, 1, 1 -17). https://www.flacsoandes.edu.ec/sites/default/files/agora/files/1259788896.cosificacion_avateres_de_una_categoria_critica_0.pdf

Smith, F. (1989). *Comprensión de la lectura. Análisis psicolingüístico de la lectura y su aprendizaje*. Trillas.

Souza, E. (2015). *La idea de multiperspectividad en el aprendizaje histórico: una investigación a partir de películas sobre el nazismo*. Clío & Asociados. (20-21), (pp. 84-96). http://sedici.unlp.edu.ar/bitstream/handle/10915/61551/Documento_completo__.pdf-PDFA.pdf?sequence=1

Valle, F. & Rodríguez, C. (2012). Running head: Multicontextuality. *Leading the 21st Century Demographic: Multi Context Theory and Latina/o Leadership*. 1-18. https://files.eric.ed.gov/fulltext/ED537728.pdf

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Exploring the relationship between educational involvement and school performance at the early education level

Explorando la relación entre la participación educativa y el rendimiento escolar en el nivel de educación inicial

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Abstract

This scientific article investigates the intrinsic relationship between educational involvement and school performance, with a special focus on the influence of parents, caregivers, and the community in the educational process. A comprehensive definition of educational involvement is provided, highlighting its importance in fostering collaboration between families and schools. Various forms of involvement are explored, ranging from attending school meetings to collaborating in academic activities. A thorough review of diverse research underscores the positive impacts of educational involvement on students' academic achievement, establishing a direct correlation between increased involvement and better school performance. However, contextual factors that can modulate this connection, such as socioeconomic status and the school environment, are acknowledged. The article also delves into the pivotal role played by educational involvement in academic performance, as well as the factors that influence the success of such involvement and its impact on school performance..

Keyword Educational involvement, school performance, early education, family-school collaboration, and educational participation.

Resumen

El artículo científico investiga la relación intrínseca entre la participación educativa y el rendimiento escolar, con un enfoque especial en la influencia de padres, cuidadores y la comunidad en el proceso educativo. Se proporciona una definición integral de la participación educativa, destacando su importancia para fomentar la colaboración entre la familia y la escuela. Se exploran diversas manifestaciones de participación, desde la asistencia a reuniones escolares hasta la cooperación en actividades académicas. La revisión exhaustiva de investigaciones diversas subraya los impactos positivos de la participación educativa en el logro académico de los estudiantes, estableciendo una correlación directa entre una mayor participación y un mejor desempeño escolar. Sin embargo, se reconocen los factores contextuales que pueden modular esta conexión, como el estatus socioeconómico y el entorno escolar. El artículo también profundiza en el papel fundamental que desempeña la participación educativa en el rendimiento académico, así como en los factores que influyen en el éxito de dicha participación y su impacto en el rendimiento escolar.

Palabras claves: Participación educativa, rendimiento escolar, educación inicial, colaboración familia-escuela y participación educativa.

Introduction

Parental involvement in their children's education is a topic of great importance today. Numerous studies have demonstrated that collaboration between parents and teachers can significantly enhance students' academic performance and overall development. This article addresses the relationship between educational involvement and school performance at the early education

level. Different approaches and strategies are presented that parents and teachers can utilize to encourage active parental participation in their children's educational process. Additionally, the benefits of effective communication among parents, teachers, and students are discussed, along with highlighting practices that can be implemented to enhance the educational quality for students. This article serves as a valuable tool for parents, teachers, and anyone interested in enhancing children's education at the early education level.

Educational Involvement of Parents and Caregivers of Children

The involvement of parents or parental participation in school education constitutes a valuable strategy to elevate educational quality. According to Driessen *et al.* (2005), this involvement expands the cognitive and social capacities of students. The terms used to refer to this participation vary: "parental involvement," "parent participation," "educational collaboration," and "parental engagement," as mentioned by these authors. On the other hand, Hujala *et al.* (2009) describe it as a collaboration between parents and teachers, while Alasuutari (2010) refers to it as relationships between parents and professionals.

Following the same line, according to Delgado (2019), *"la participación de los padres en el proceso educativo implica que tanto maestros como padres compartan la responsabilidad de educar a los alumnos y colaboren para alcanzar los objetivos educativos" (parr. 1)*[1]. Uludağ (2008) defines parental involvement as the collaboration between parents and teachers in a child's learning. However, the term is complex due to divergent perspectives mentioned by Rapp & Duncan (2012), who point out that there are differing opinions among teachers and parents. Regarding this matter, Anderson & Minke (2007) suggest that teachers consider involvement to be active in school, while for parents, involvement in their children's learning could mean providing what they need in their educational institution.

From our perspective, an education based on shared responsibility is required, involving both educators and parents, transcending the exclusive responsibility of teachers, the educational institution, and the State. Educational involvement encompasses active and committed collaboration among parents, caregivers, community members, and the educational institution. Its objective is to enrich students' educational experience and improve their academic performance.

This topic has been extensively addressed in scientific research. In this regard, Blanco & Umayahara (2004) pointed out that there are three approaches through which parental involvement is addressed. One of them evaluates the relationship between family-school collaboration and improved educational performance in elementary school children. Others place fundamental importance on parents, mothers, caregivers, and the community during the early years, con-

[1] Our translation: The involvement of parents in the educational process implies that both teachers and parents share the responsibility of educating students and collaborate to achieve educational objectives.

sidering that quality education translates to enhanced child learning development. However, it is also argued that the family has the potential to expand the scope of primary education.

According to Blanco & Umayahara (2004), family involvement in education implies *"opinar, tomar ciertas decisiones, proponer y disentir en los diversos espacios de la institución educativa" (p. 26)*[2]. Therefore, the act of participating goes beyond merely attending school meetings, providing contributions to educational institutions, or volunteering in the institution. In this sense, mothers have the opportunity to approach institutions and establish direct contact with teachers to better understand how they can support their children's education, which not only improves children's living conditions but also significantly contributes to their learning process.

The contribution of parents or mothers can manifest in various ways by providing support to their children's education. According to Silinkas & Kikas (2019), parents or caregivers have the possibility to complete school tasks or assignments together with children, establishing a conducive learning environment at home. On the other hand, Benner *et al.* (2016) point out that parents can play an active role by providing stimulation and educational enrichment activities, thus promoting the holistic development of their children beyond the classroom. Additionally, collaboration in parent-teacher organizations is also a significant form of involvement, as it strengthens the connection between school and home, promoting a more robust and beneficial educational environment for students.

One of them involves establishing a daily structure that includes dedicated study and exploration time, resulting in the creation of a stable routine for children. Furthermore, in line with these support strategies, it is essential to share the experience of reading by practicing reading books together and engaging in conversations about the stories to cultivate a love for reading. At the same time, by engaging children in conversations about a variety of topics, their vocabulary can be expanded, and the development of critical thinking can be fostered, known as "Meaningful Conversations." These practices, supported by Silinkas & Kikas (2019) and Benner *et al.* (2016), reinforce the fundamental role of parents in education and the holistic growth of their children.

On the other hand, a connection with nature can be a valuable means to stimulate children's curiosity by exploring the environment through outdoor outings. Active involvement extends to practical activities such as cooking, measuring, and building together, allowing the application of mathematical and scientific concepts in real situations. Additionally, artistic expression can be encouraged by involving children in activities like drawing, painting, and crafts. Support in school tasks when needed promotes the child's autonomy, and supervising and selecting online educational resources are also part of the process. All these concrete actions by parents significantly contribute to the education and comprehensive growth of children.

[2] Our translation: opining, making certain decisions, proposing, and dissenting in various spaces within the educational institution.

Fundamental Role of Educational Involvement in Academic Performance

From our perspective, educational involvement has a significant impact on students' academic performance. According to the study by Topor *et al.* (2010), it is concluded that children whose parents are more engaged in their education achieve a higher level of academic performance compared to those whose parents are less involved.

Therefore, according to Sánchez *et al.* (2010), the level of parents' participation and satisfaction serves as an indicator of the quality of the educational system. This aspect possibly constitutes one of the reasons why a connection is established between parental involvement and academic performance. In this relationship, it is relevant to cite authors like Castro *et al.* (2015) who assert that without positive cooperation between the family and the school, it is not possible to meet the high standards set for educational outcomes by a demanding society.

On the other hand, Jeynes (2016) found a significant relationship between overall parental involvement programs and academic performance, both for younger and older students. Likewise, Rogers *et al.* (2009) maintain that the effects of parental involvement are mediated by children's academic competence. These studies confirm the interactive influences of parental educational involvement and children's personal characteristics in predicting school performance.

In this sense, the active participation of parents and caregivers in education shows students that they have support and value in their learning process. This can increase their motivation to achieve optimal academic performance, as they perceive their efforts to be recognized and appreciated. As Rodríguez (2016) argues: "*los padres son los mejores agentes para ayudar a sus hijos*" (p. 2) in developing their skills and cultivating a sense of satisfaction and motivation.

It is important to note that parents, caregivers, or guardians who actively participate in their children's education often set clear expectations regarding academic achievements and behavior. This approach can help students understand the relevance of education and strive for higher goals. Likewise, parental involvement allows for closer monitoring of students' academic progress, enabling them to identify areas where a student may need additional support and take action to address those needs in a timely manner.

In this context, communication among parents, teachers, and students plays a crucial role in understanding students' strengths and weaknesses. Parents can provide valuable information about their children's needs and personality, which in turn enables teachers to adapt their pedagogical approach and address those needs effectively. In relation to this, Zambrano *et al.* (2019) state that "*una comunicación sólida en el seno familiar para establecer vínculos fuertes,*

[3] Our translation: parents are the best agents to help their children.

no confundidos con un régimen riguroso de disciplina, sino más bien un entorno saludable donde prime la confianza y el respeto" (p. 141).

When parents actively participate in their children's learning process, they can provide additional support outside the classroom, assist with assignments and projects, and offer explanations and clarifications when necessary, thereby reinforcing learning and improving comprehension of concepts. Additionally, involved parents can detect academic or behavioral problems at an early stage, allowing them to address these issues before they become significant obstacles to academic performance.

Educational involvement is also related to creating a positive learning environment at home. Parents can foster a love for learning, provide educational resources, and establish routines that support academic success. Furthermore, students often emulate the behavior of adults in their lives. If they see their parents caring about education and actively participating in it, they are more likely to value and engage in their own learning.

Moderating Factors of Educational Involvement and Academic Performance

Moderating factors play a crucial role in the relationship between educational involvement and academic performance. Moderating factors are variables that influence the strength or direction of this relationship. Among them, the following can be mentioned:

- Socioeconomic Level: The socioeconomic level of parents can moderate the relationship between educational involvement and academic performance. In families of higher socioeconomic status, it is more likely that resources and support are available for students, which could intensify the positive effects of parental involvement. According to León & Collahua (2016), *"el nivel socioeconómico de las familias incide de manera positiva y significativa en el rendimiento de los estudiantes"* (p. 120). In contrast, the findings of Korzeniowski (2016) corroborated that a lower socioeconomic level has a negative influence on children's academic performance.

- Culture and Ethnicity: Cultural and ethnic differences can influence how educational involvement is understood and carried out. Some cultures may value more direct participation in education, while others may prefer a more indirect approach. These cultural differences can moderate the relationship between involvement and performance. Studies by Miranda & Castillo (2016) have confirmed that families belonging to an indige-

[4] Our translation: solid communication within the family is needed to establish strong bonds, not confused with a strict regime of discipline, but rather a healthy environment where trust and respect prevail.

[5] Our translation: the socioeconomic level of families positively and significantly impacts students' performance.

nous ethnicity have a high rate of support and educational involvement compared to those not belonging to any ethnicity.

- School Support: The quality of the school environment and the degree of collaboration between the school and parents can moderate the influence of educational involvement on performance. A favorable school environment can amplify the positive effects of parental involvement. Lastre *et al.* (2017), Barbar & Coronel (2022), and Serrano & Figueroa (2016), Peña & Taboada (2018) state that children whose parents accompany them, provide feedback, and show interest in their school life tend to achieve higher levels of academic performance. When parents maintain effective communication, participate in school activities, monitor progress, and have high educational aspirations for their children, these children achieve notably superior academic performance.

- Parents' Educational Level: The parents' educational level can moderate the influence of their involvement in their children's education. In this line, research conducted by Rodríguez & Guzmán (2019) and Espejel & Jiménez (2019) highlight that parents with higher educational levels possibly have better tools to provide academic support and more effectively understand their children's needs.

- Parenting Style: Parenting style, including the combination of authority, support, and control, can moderate the relationship between parental involvement and academic performance. Parenting styles that promote autonomy and responsibility are often associated with positive academic outcomes. Ortiz & Moreno (2016) argue that parenting style determines whether academic performance is good or poor.

- Access to Resources: The availability of resources at home, such as books, technology, and a suitable study space, can moderate how parental involvement impacts school performance. Available resources can influence the effectiveness of the educational support parents can provide. However, as Gubbins & Ibarra (2016) assert, this resource availability is related to socioeconomic level; if income and cultural capital are low, there is less educational involvement, which impacts children's academic performance.

- Emotional and Social Support: The emotional and social support that students receive in the family environment can influence the relationship between parental involvement and academic performance. An environment that provides emotional support and security can lay the foundation for more effective learning and better educational achievement. Research conducted by Silinkas & Kikas (2019) supports the idea that parental support becomes emotional support when requested by children.

  On the other hand, studies conducted by Hakyemez & colleagues (2018) explain that a strong interaction between parents and teachers can have a significant impact on children's academic performance, improving various aspects of their development and their ability to adapt, as well as their psychological well-being during early childhood. Addi-

tionally, according to Bronfenbrenner (1987), these interactions positively contribute to children's socioemotional and cognitive development.

- Parental Work Flexibility: The ability of parents to be present and engaged in their children's education can be influenced by their work flexibility. Parents with more flexible schedules may have more opportunities to actively participate in the educational process. Studies by Kim (2020) confirm that work flexibility can contribute to promoting interactions between parents and children by improving the coordination between work and family responsibilities and, consequently, with their children's education. Alzahrani *et al.* (2019) mention "el desarrollo de estas habilidades socioemocionales llevará a mejores resultados escolares, una adaptación más efectiva al aprendizaje futuro, mayor bienestar y la capacidad para gestionar comportamientos positivos" (p. 148).

- School Communication and Collaboration: The relationship between the school and parents can influence how parental involvement impacts performance. Effective communication and collaboration between the school and parents can enhance the benefits of educational engagement. According to Western Governors University (2021), when a student's family can communicate with their child's teacher, both parties can work together to establish a relationship and create an optimal learning environment, both at home and at school.

Conclusions

1 After conducting the analysis of the relationship between educational involvement and academic performance at the early education level, the following conclusions can be drawn:

2 Active parental involvement in their children's education is essential for improving academic performance and the holistic development of students. Parents can collaborate with teachers in planning educational activities and assessing their children's progress.

3 Effective communication among parents, teachers, and students is key to fostering educational involvement. Parents should be informed about their children's academic progress, and teachers should be willing to listen to parents' concerns and suggestions.

4 Shared reading and meaningful conversations are practices that parents can implement to foster a love for reading and the development of critical thinking in their children. These practices have been supported by scientific studies and can be used from an early age.

[6] Our translation: that the development of these socioemotional skills will lead to better school results, more effective adaptation to future learning, greater well-being, and the ability to manage positive behaviors.

5 Collaboration between parents and teachers can be beneficial for students with special needs. Parents can provide valuable information about their children's needs, and teachers can adapt educational activities to meet those needs.

6 Community involvement in children's education is also important. Parents and teachers can work together to engage the community in educational activities and promote the significance of education in society.

References

Alasuutari, M. (2010). Striving at partnership: parent–practitioner relationships in Finnish early educators' talk. *European Early Childhood Education Research Journal*, 18(2). https://doi.org/10.1080/13502931003784545

Alzahrani, N. Alharbi, M. & Alodwani, A. (2019). The Effect of Social-Emotional Competence on Children Academic Achievement and Behavioral Development. *International Education Studies*, 12(12), 141-149. https://files.eric.ed.gov/fulltext/EJ1235885.pdf

Anderson, K. J. & Minke, K. M. (2007). Parent involvement in education: Toward an understanding of parents' decision making. *Journal of Educational Research*, 100(5), 311–323. https://www.jstor.org/stable/27548195

Barbar, D. M. E. and Coronel, I. M. (2022). *Estilo parental, apoyo en el ámbito escolar y rendimiento académico en adolescentes*. [Trabajo Final para acceder al Título de Licenciatura en Psicopedagogía]. Pontificia Universidad Católica Argentina. https://repositorio.uca.edu.ar/bitstream/ 123456789/15838/1/estilo-parental-apoyo.pdf

Benner, A. D., Boyle, A. E., & Sadler, S. (2016). Parental Involvement and Adolescents' Educational Success: The Roles of Prior Achievement and Socioeconomic Status. *Journal of Youth and Adolescence*, 45(6), 1053–1064. https://doi.org/10.1007/s10964-016-0431-4

Blanco, R. and Umayahara, M. (2004). Participación de las familias en la educación infantil latinoamericana. Santiago de Chile: Oficina Regional para la Educación de América Latina y el Caribe/UNESCO. https://unesdoc.unesco.org/ark:/48223/ pf0000139030

Bronfenbrenner, U. (1987). *La Ecología del Desarrollo Humano*. Barcelona: Ediciones Paidós Ibérica.

Castro, M., Expósito, C. E., López, M. E., Lizasoain, L., Navarro, A. E., & Gaviria, J. J. (2015). Parental involvement on student academic achievement: a meta-analysis. *Educ. Res. Rev*, 14, 33–46. doi: 10.1016/j.edurev.2015.01.002

Delgado, P. (2019). La importancia de la participación de los padres en la enseñanza. *Edu News*

RSS. Observatorio del Instituto para el Futuro de la Educación.https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source =web&cd=&cad=rja&uact=8&ved=2ahUKEwign7G0oY6BAxU2M0QIHSScDCgQFnoECBEQAQ&url=https%3A%2F%2Fobservatorio.tec.mx%2Fedu-news%2Fla-importancia-de-la-participacion-de-los-padres-en-la-educacion%2F&usg=AOvVaw2S4UByG1YjQt9t1ktPTmh6&opi=89978449

Espejel, G. M. V. y Jiménez, G. M. (2019). Nivel educativo y ocupación de los padres: Su influencia en el rendimiento académico de estudiantes universitarios. *RIDE. Revista Iberoamericana para la Investigación y el Desarrollo Educativo*, 10(19), e026. https://doi.org/10.23913/ride.v10i19.540

Hujala, E., Turja, L., Gaspar, M. F., Veisson, M., & Waniganayake, M. (2009). Perspectives of early childhood teachers on parentteacher partnerships in five European countries. *European Early Childhood Education Research Journal*, 17(1), 57–76. https://doi.org/10.1080/13502930802689046

Gubbins, V. e Ibarra, S. (2016). Estrategias Educativas Familiares en Enseñanza Básica: Análisis Psicométrico de una Escala de Prácticas Parentales. *Psykhe*, 25 (1), 1-17. https://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0718-22282016000100010

Hakyemez, P. S., Pihlaja, P., & Silvennoinen, H. (2018). Factors Affecting Early Childhood Educators' Views and Practices of Parental Involvement. *Journal of Early Childhood Education Research*, 7(1), 76–99. https://journal.fi/jecer/article/view/114086

Jeynes, W. H. (2012). A Meta-Analysis of the efficacy of different types of parental involvement programs for urban students. *Urban Educ*, 47, 706–742. doi: 10.1177/0042085912445643

Kim, J. (2020). Workplace Flexibility and Parent–Child Interactions Among Working Parents in he U.S. *Social Indicators Research*, 151(2),1-43. https://psycnet.apa.org/record/2018-61119-001

Korzeniowski, C., Cupani, M., Ison, M. and Difabio, H. (2016). Rendimiento escolar y condiciones de pobreza: el rol mediador de las funciones ejecutivas. *Electronic Journal of Research in Educational Psychology*, XIV(3), 474-494. https://ri.conicet.gov.ar/bitstream/handle/11336/47392/ CONICET_Digital_Nro.a99fea 8c-3ccb-4f87-8b95-ec0e34db68e9_B.pdf?sequence=8&isAllowed=y

Lastre, M. K., López, S. L. D. and Alcázar, B. C. (2017). Relación entre apoyo familiar y el rendimiento académico en estudiantes colombianos de educación primaria. *Psicogente*, vol. 21, núm. 39, pp. 102-115. https://www.redalyc.org/journal/4975/497555219009/html/

León, J. y Collahua, Y. (2016). *El efecto del nivel socioeconómico en el rendimiento de los estudiantes peruanos: un balance de los últimos 15 años*. GRADE. http://biblioteca.clacso.

edu.ar/ Peru/grade/20170417120817/nserendimiento_JL_35.pdf

Miranda, C. C. and Castillo, A. P. (2020). Participación y apoyo de la familia indígena en los procesos educativos análisis de las prácticas pedagógicas. *Educação & Sociedade*, 41(e211521), 1-11. https://www.researchgate.net/publication/343712472 _PARTICIPACION_Y_APOYO_DE_LA_FAMILIA_INDIGENA_EN_LOS_PROCESOS_EDUCATIVOS_ANALISIS_DE_LAS_PRACTICAS_PEDAGOGICAS

Ortiz, Z. M. de L. and Moreno, A. O. (2016).Estilos parentales: implicaciones sobre el rendimiento escolar en alumnos de educación media. *Revista Digital Internacional de Psicología y Ciencia Social*, 1-20. https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=0CDcQw7AJahcKEwjg7rP6pY2BAxUAAAAAHQAAAAAQAw&url=https%3A%2F%2Fcuved.unam.mx%2Frdipycs%2Fwp-content%2Fuploads%2F2016%2F12%2F293-692-1-Decision-Editorial.pdf&psig=AOvVaw1oxj_0J_od7fTYW53H7bek&ust=1693790654257321&opi=89978449

Peña, P. and Taboada, M. (2018). *Implicancias del involucramiento parental en el rendimiento académico*. [Tesis de Bachillerato Universidad de Perú]. http://repositorio.urp.edu.pe/handle/URP/1612

Rapp, N. & Duncan, H. (2012). *Multi-Dimensional Parental Involvement in Schools: A Principal's Guide*. National Council of Professors of Educational Administration, Connexions module: m42022. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiztejawY6BAxUFM0QIHblkAkwQFnoECBAQAQ&url=https%3A%2F%2Ffiles.eric.ed.gov%2Ffulltext%2FEJ971515.pdf&usg=AOvVaw0AKiFo9kzf0e4u-QgZQKyM&opi=89978449

Rodríguez, N. (2016). *Neuroeducación para padres*. Penguin Random House Grupo Editorial

Rodríguez, R. D. and Guzmán, R. R. (2019). Rendimiento académico de adolescentes declarados en situación de riesgo. *Revista de Investigación Educativa*, 37(1), 147-162.

Rogers, M. A, Theule, J., Ryan, B. A, Adams, G. R & Keating, L. (2009). Parental Involvement and Children's School Achievement: Evidence for Mediating Processes. *Canadian Journal of School Psychology*, 24 (1), 34–57. https://doi.org/10.1177/0829573508328445

Sánchez, E. P. A., Valdés, C. Á. A., Reyes, M. N. M. and Carlos, M. E. A. (2010). Participación de padres de estudiantes de educación primaria en la educación de sus hijos en México. *Liberabit. Revista de Psicología*, 16(1), 71-80. https://www.redalyc.org/pdf/686/68615511008.pdf

Serrano, B. and Figueroa, M. (2016) Funcionalidad de la familia y su incidencia en el rendimiento académico en adolescentes. Dialnet. *Didáctica y Educación*, 7 (1).

https://dialnet.unirioja.es/servlet/articulo?codigo=6568049

Silinskas, G., & Kikas, E. (2019). Parental involvement in math homework: Links to children's performance and motivation. *Scandinavian Journal of Educational Research*, 63(1), 17–37. https://doi.org/10.1080/00313831. 2017.1324901

Topor, D. R., Keane S. P., Shelton T. L. & Calkins, S. D. (2010). Parent involvement and student academic performance: A multiple mediational analysis. *J Comunidad Interv Anterior*, 38(3), 183-97. doi: 10.1080/10852352.2010. 486297.

Western Governors University. (2021). Harnessing Parent Teacher Collaboration. July 7, 2021. *Teaching & Education*. https://www.wgu.edu/blog/harnessing-parent-teacher-collaboration2107.html#close

Zambrano, M. Y. Y. de los Á., Campoverde, C. A. C. and Idrobo, C. J. C. (2019). Importancia entre la comunicación padres e hijos y su influencia en el rendimiento académico en estudiantes de bachillerato. *Polo Del Conocimiento*, 4(5), 138–156. https://doi.org/10.23857/pc.v4i5.969

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Empowering Secondary Education: Strategies for Developing Emotional Intelligence in the Classroom

Potenciando la Educación Secundaria: Estrategias de desarrollo de inteligencia emocional en el aula

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Abstract

he article focuses on the importance of developing emotional intelligence in high school students. In this regard, it underscores the need for teachers to concentrate on the development of emotional skills in students, as this can enhance their academic performance and emotional well-being. It also provides a review of the literature on emotional intelligence and its relationship to learning, as well as a description of strategies that teachers can use to promote the development of emotional intelligence in the classroom. Additionally, it highlights the importance of teacher training on this subject and suggests its inclusion in initial and ongoing training programs.

Keyword: High school education, emotional intelligence, development, strategies, teacher training.

Resumen

El artículo se enfoca en la importancia de desarrollar la inteligencia emocional en los estudiantes de educación secundaria. En este propósito se destaca la necesidad que los docentes se enfoquen en el desarrollo de habilidades emocionales en los estudiantes, ya que esto puede mejorar su rendimiento académico y su bienestar emocional. Además presenta una revisión de la literatura sobre la inteligencia emocional y su relación con el aprendizaje, así como una descripción de las estrategias que los docentes pueden utilizar para fomentar el desarrollo de la inteligencia emocional en el aula. También destaca la importancia de la formación docente en este tema y sugiere que se incluya en los programas de formación inicial y continua.

Palabras clave: Educación secundaria, inteligencia emocional, desarrollo, estrategias, formación docente.

Introduction

Emotional intelligence is of utmost importance for learning and the emotional well-being of students. For this reason, this article offers a review of the literature on the subject. From the ideas presented, practical strategies are introduced that teachers can use to foster the development of emotional intelligence in the classroom. The importance of establishing a school environment where values such as respect, trust, love, solidarity, and empathy prevail is highlighted.

In fostering emotional intelligence in the classroom, it is important for the teacher to be eloquent, that is, to have the ability to communicate ideas and emotions clearly, effectively, and persuasively, both orally and in writing, in order to inspire students and encourage similar behavior in them. Likewise, the teacher must develop their empathetic capacity towards students, thereby establishing relationships based on trust and respect.

The article also reveals the importance of teacher training in emotional intelligence and suggests its inclusion in initial and ongoing training programs. In this sense, it serves as a useful guide

for any teacher wishing to enhance the academic performance and emotional well-being of their high school students. With valuable information and practical strategies, it is an essential tool for any educator looking to improve their educational practice and help their students develop important emotional skills.

Definition of Emotional Intelligence

The term "emotional intelligence" was first introduced into academic literature in 1985 by Wayne in a doctoral thesis titled "A study of emotion: developing emotional intelligence; self-integration; relating to fear, pain and desire (theory, structure of reality, problem-solving, contraction/expansion, tuning in/coming out/letting go)". According to Wayne (1985), it is a faculty of consciousness. Later, Salovey & Mayer (1990) published the emotional intelligence model in their article "Emotional Intelligence" which appeared in "Imagination, Cognition, and Personality". These authors referred to Howard Gardner's interpersonal intelligence as "emotional intelligence". Mayer and Salovey (1997), as cited by Mayer *et al.* (2012, para. 1), state: "we define emotional intelligence as the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in oneself and others."

However, it was Daniel Goleman who truly popularized the concept with the publication of his 1995 book "Emotional Intelligence". Although Goleman himself (1996, p. 11) acknowledges: *"A Peter Salovey, de Yale, le debo el concepto de Inteligencia emocional".*[1] Goleman (1996, p. 64) argues that emotional intelligence refers to the ability to *"Conocer sus propias emociones, manejar las emociones, la propia motivación, reconocer emociones en los demás y el arte manejar las relaciones"*[2]. Yet, more recently, Goleman (2021, p. 75) revises his definition, stating:

> *la inteligencia emocional es la capacidad de motivarnos a nosotros mismos, de perseverar en el empeño a pesar de las posibles frustraciones, de controlar nuestros impulsos, de diferir las gratificaciones, de regular nuestros propios estados de ánimo, de evitar que la angustia interfiera con nuestras facultades racionales y de empatizar y confiar en los demás*[3].

[1] Our translation: I owe the concept of Emotional Intelligence to Peter Salovey of Yale.

[2] Our translation: know one's own emotions, manage emotions, self-motivation, recognize emotions in others, and the art of managing relationships".

[3] Our translation: Emotional intelligence is the ability to motivate ourselves, to persevere in our endeavors despite potential frustrations, to control our impulses, to delay gratification, to regulate our own moods, to prevent distress from interfering with our rational faculties, and to empathize and trust in others..

Meanwhile, Bisquerra (2012a, p. 8) contends that emotional intelligence *"es la habilidad para tomar conciencia de las propias emociones y de las demás personas y la capacidad para regularlas"*[4]. However, as early as 1920, Thorndike wrote an article in "Harper's Magazine" titled "Intelligence and its uses" where he introduced a specific element of emotional intelligence: social intelligence, "the ability to understand others and act wisely in human relationships". According to Thorndike, intelligence had three dimensions: (a) abstract intelligence, related to handling symbols (words, numbers, formulas, legal decisions, laws). (b) Mechanical intelligence, an ability to understand and handle objects and tools. (c) Social intelligence, the skill to understand and manage people (Molero, Saiz, and Esteban, 1998).

The Spheres of Emotional Intelligence in Secondary Education

This theory has had a significant impact in various areas, including education. In his work, Goleman argues that emotional intelligence is at least as important as cognitive intelligence for success in life. Emotional intelligence comprises several skills and competencies, including self-awareness, self-regulation, motivation, empathy, and social skills. The first three dimensions pertain to the self and depend on the individual. However, the last two are related to social skills.

Regarding secondary education, it is a pivotal period in the development of young people. During this stage, adolescents face numerous challenges, both academic and emotional and social. Implementing Goleman's theory in this environment can have significant benefits if we closely look at the spheres of emotional intelligence mentioned by Salovey, from which we can deduce the following from Goleman:

Self-awareness. By fostering self-awareness, students can recognize their emotions and understand how they affect their behavior and decision-making. This is particularly useful during adolescence, a period of intense emotional fluctuation. Diligent self-reflection and introspection in the classroom are vital for a good school, social, and family climate. Goleman (1996, p. 68) states that *"esta conciencia de las emociones es la competencia emocional fundamental sobre la que se construyen las demás, como el autocontrol emocional"*[5] Mayer, quoted by Goleman (1996, p. 69), says that self-awareness is being "*consciente de nuestro humor y también de nuestras ideas sobre ese humor"*[6]. Bisquerra (2012b, p. 25) states it's "*conocer las propias emociones y las emociones de los demás"*[7]. This is no easy task because even when going through a tough time,

[4] Our translation: It is the ability to become aware of one's own emotions and those of others, and the capacity to regulate them.

[5] Our translation: this awareness of emotions is the fundamental emotional competency upon which others are built, such as emotional self-control.

[6] Our translation: conscious of our mood and also of our ideas about that mood.

[7] Our translation: knowing one's own emotions and the emotions of others."

one has to be able to think positively and not dwell on the negative or disturbing thoughts.

In the classroom, our secondary education students present unique cultural, technological, and social characteristics because they have immediate access to information through their phones. Besides easily handling electronic media and different digital platforms, our secondary students have developed resilience and adaptability, having grown up in a time of rapid technological and social changes, as well as in a context of economic crises and global tensions.

Moreover, teachers need to understand that our young people have a global awareness of social and global issues (climate change, gender equality, and social justice issues) because they have had access to global information from an early age and, as a result, tend to be more aware of social and global problems. This partly explains their behaviors and opinions at times when they disagree with others who lack the same information.

Self-regulation. Goleman (1996, p. 64) describes it as *"La capacidad de serenarse, de librarse de la irritabilidad, la ansiedad y la melancolía excesivas... y las consecuencias del fracaso en esta destreza emocional básica"*.[8] Bisquerra (2012b, p. 26) mentions it's "*dar una respuesta apropiada a las emociones que experimentamos"*[9]. From our perspective, it means that students must learn to control their emotions, as this can help them handle stress, pressure, and social tensions more effectively. This is vital for academic performance and mental health. But similarly, teachers must also act with self-regulation in stressful situations in the classroom or personal life, as this can influence their relationship with their students and other members of the community and coworkers.

Teachers must remember that the current generation of students is more open to discussing mental health than previous generations. However, higher rates of stress, anxiety, and depression have been observed compared to previous generations, although the causes are complex and multifactorial.

Given this fact, classroom efforts should be focused on the self-regulation of young people. The classroom should be a space where emotional control exists between student-teacher and vice versa. Educators can model emotional intelligence through their behavior, showing how to handle stress, resolve conflicts, and communicate effectively. Incorporating mindfulness or relaxation techniques in the classroom can help students become more aware of their emotions and regulate their behavior. Bisquerra (2012b, p. 26) mentions techniques to achieve self-regu-

[8] Our translation: The ability to soothe oneself, to shake off rampant irritability, anxiety, and sadness... and the consequences of failure in this basic emotional skill.

[9] Our translation: giving an appropriate response to the emotions we experience.

lation, such as *"diálogo interno, control del estrés (relajación, meditación, respiración), autoafirmaciones positivas; asertividad; reestructuración cognitiva, imaginación emotiva, atribución causal, etc."*[10] Furthermore, he states that it requires continuous practice and mentions regulating emotions such as la *"ira, miedo, tristeza, vergüenza, timidez, envidia, alegría, amor, etc."* (p. 26)[11].

Motivation. By understanding the emotional triggers driving motivation, educators can create more engaging and stimulating learning environments. Goleman (1996, p. 64) mentions the *"necesidad de ordenar las emociones al servicio de un objetivo es esencial para prestar atención, para la automotivación y el dominio, y para la creatividad"*[12]. In this sense, emotional intelligence can play a crucial role in creating more engaging and stimulating learning environments, especially in secondary education, where students are at a crucial stage of emotional and social development.

In this context, it is crucial to recognize and celebrate students' achievements in academic, emotional, and social areas, as this positively impacts their self-esteem and motivation levels. According to Schunk (2012, p. 346), motivation is a deep psychological phenomenon influencing learning.*"Los estudiantes motivados para aprender prestan atención a la enseñanza y se involucran en actividades"*.[13] Bain *et al.* (2010) also highlighted the correlation between student motivation and the effectiveness of their learning process. In line with this, Tella (2007) pointed out that it's challenging to achieve satisfactory learning outcomes without adequate motivation to learn.

Maintaining and stimulating student motivation can be a key element in ensuring effective learning. Consider the words of Duchatelet and Donche (2019) from their research conducted in Holland:

> The results indicate that autonomy-supportive teacher behavior enhances self-efficacy for students who are autonomously motivated. Amotivated students might need other than autonomy-supportive teacher behavior to develop self-efficacy.

Additional studies conducted in Germany, such as that of Bürgermeister *et al.* (2016), have explored how emotional factors are affected in environments that promote autonomy. Their con-

[10] Our translation: internal dialogue, stress control (relaxation, meditation, breathing), positive self-affirmations; assertiveness; cognitive restructuring, emotional imagination, causal attribution, etc.

[11] Our translation: anger, fear, sadness, shame, shyness, envy, joy, love, etc.

[12] Our translation: need to marshal emotions in the service of a goal is essential for paying attention, for self-motivation and mastery, and for creativity.

[13] Our translation: Motivated students pay attention to teaching and engage in activities.

clusions show that when students feel they have adequate control over their environment (competence), they also experience a sense of social support from their teacher (relationship). In other words, an educational environment that supports autonomy is associated with a greater sense of competence and the perception of significant social support.

Recognizing Others' Emotions (Empathy). Goleman (1996, p. 123) tells us that empathy is *"esa capacidad –o la habilidad de saber lo que siente otro"*. However, its foundation is self-awareness; if one is not open to oneself, one cannot understand the feelings of others. Karimi *et al.* (2014) and Vidyarthi *et al.* (2014) have determined that emotional intelligence refers to the understanding of ourselves and others, the self-control of immediate needs, people's empathy, and the positive exercise of emotions. It's a challenging task for teachers with their students and themselves. Nowadays, when people are more insensitive, teaching empathy from school is necessary, and secondary school can lead to more inclusive and tolerant environments.

Empathy aids in conflict resolution and improves students' social skills. The classroom should be a safe space for emotional expression, meaning that an environment where students feel safe expressing their emotions and opinions can foster more authentic and engaged learning. Teaching and modeling effective conflict resolution techniques can foster a more inclusive and harmonious environment. Taking the time to understand students' emotions and needs, without judging or making assumptions, is key to a positive teacher-student relationship.

Social Skills (managing relationships). Goleman (1996, p. 141) states, *"esta habilidades sociales le permiten a uno dar forma a un encuentro, movilizar o inspirar otros, prosperar en las relaciones íntimas, persuadir e influir, tranquilizar a los demás"*. We believe that emotional intelligence promotes social skills that are crucial for teamwork, conflict resolution, and effective communication, competencies that are increasingly important in the workplace.

Case Studies and Successful Experiences

Research confirms a relationship between academic performance and emotional intelligence (Titrek *et al.*, 2018; Ashknasy & Dasborough, 2003; kbaribooreng, 2015; Martínez, *et al.* 2020, Fallahzadeh, 2011; Duchatelet & Donche, 2019). Others, like Song (2010), argue that emotional intelligence enables student academic performance and the quality of their social interactions with peers. Fallahzadeh (2011), while studying adolescents in Iran, found significant differences in emotional intelligence scores based on the students' habitat.

[14] Our translation: that ability - or the skill to know what another feels.

[15] Our translation: these social skills allow one to shape an encounter, mobilize or inspire others, thrive in intimate relationships, persuade and influence, reassure others.

In their research, Llibre *et al.*, (2015) found that Cuban students with high levels of emotional intelligence tend to achieve higher academic performance, while those with lower levels of emotional intelligence tend to get lower grades. Thus, a predominance of favorable academic results was observed in students with high emotional intelligence.

Studies conducted in China by Chang & Tsai (2022) evaluated four dimensions of emotional intelligence, including the assessment of one's own emotions, emotional assessment of others, use of emotions, and regulation of emotions. The results showed that students' emotional intelligence had a positive effect on their motivation for learning and their self-efficacy.

Furthermore, the mediation analysis revealed that the relationship between emotional intelligence and academic performance was sequentially mediated by motivation for learning and self-efficacy. Buitrago & Herrera (2013) note that managing emotions in the school environment would represent a significant dynamic component in education, which would help improve interpersonal relationships and performance. Meanwhile *et al.*, (2022) in Riyadh, (Africa) have reported that students with excellent academic performance had a high level of emotional intelligence.

In the Valencian Community of Spain, a study conducted by Ordóñez *et al.* (2014) investigated the relationship between emotional awareness, moods, and academic performance. The analysis showed a significant correlation between these variables. Specifically, students with greater abilities to identify, communicate, and reflect on their emotions, pay attention to the emotions of others, and maintain bodily awareness, achieved higher academic performance. Additionally, these students exhibited higher levels of happiness. In contrast, those students who scored lower on emotions such as sadness, fear, and anger tended to perform worse academically. Based on these results, the researchers determined that students with more advanced emotional skills and positive moods tend to achieve better academic outcomes.

Kbaribooreng *et al.* (2015) found in Iran a significant correlation between all components of emotional intelligence and the academic performance of Zabol high school students. This suggests that integrating lessons with socio-emotional learning in schools could improve student performance. Kbaribooreng *et al.* (2015) state:

> In this regard, EI [emotional intelligence] can predict the performance because it shows how an individual can immediately apply his knowledge in different situations, a person who does not have the emotional skills will face problem in transforming their potential knowledge into observable performance.

In a project led by Postigo *et al.* (2019) and supported by the Ministry of Economy and Competitiveness of Spain in collaboration with the Universitat de València, a study was conducted to assess the perceived effects by adolescents participating in the Emotional Education Program. This innovative program is based on a model that emphasizes emotional intelligence skills and uses a dialogic approach aimed at fostering deep and meaningful learning. The study's results show significant advances in the four dimensions of emotional competence that the emotional

intelligence model describes, as well as progress in related areas.

In Spain, Carbonell *et al.* (2019) implemented a *Coexistence and Emotional Intelligence Program*[17] in Secondary Education with students between 11 and 15 years old to *"prevenir las situaciones de acoso escolar del centro a través del aprendizaje y la práctica de la Inteligencia Emocional"*[17] (Carbonell *et al.*, 2019, p. 9). The results showed an increase in emotional intelligence levels and a reduction in bullying behaviors, especially in Social Competence and empathy. Such research is a valuable indicator when seeking alternatives to address bullying issues among secondary education students.

Ezeiza *et al.* (2008), also in Spain, launched a project through the Diputación Foral de Gipuzkoa aimed at the Gipuzkoan educational community, covering ages from 3 to 20 years. The primary purpose was to provide a practical and guiding program, of a cross-curricular nature, focused on the development of Emotional Intelligence through "tutorial action." The ultimate goal is that, upon completing their academic training, young people possess emotional competencies that enable them to promote and integrate into an emotionally intelligent and innovative territory. For this, the project has developed educational materials with practical exercises intended for both students and teachers of each proposed educational level.

Among the strategies and procedures to implement the emotional education project are: Occasional guidance, parallel programs, elective subjects, tutorial action, curricular integration, and education for citizenship. They also propose the phases of:

> (a) Context analysis: environmental context, structure, format (duration), resources, teacher situation, school climate, etc. (b) Needs identification: recipients, objectives, etc. (c) Design: justification, objective formulation, content to develop, selection of activities, resources, deadlines, recipients, evaluation criteria, and costs. (d) Execution: implementation of activities. Attention to possible variations. (e) Evaluation: it is not enough to offer evaluations, the evaluation consists of one of the basic elements (Ezeiza *et al.*, 2008, p. 11)[18].

[16] Our translation: Coexistence and Emotional Intelligence Program.

[17] Our translation: prevent bullying situations in the school through learning and practicing Emotional Intelligence.

[18] Our translation: (a) Context analysis: environmental context, structure, format (duration), resources, teacher situation, school climate, etc. (b) Needs identification: recipients, objectives, etc. (c) Design: justification, objective formulation, content to develop, selection of activities, resources, deadlines, recipients, evaluation criteria, and costs. (d) Execution: implementation of activities. Attention to possible variations. (e) Evaluation: it is not enough to offer evaluations, the evaluation consists of one of the basic elements (Ezeiza *et al.*, 2008, p. 11).

Among the program's contents are: Emotional intelligence, knowledge of one's emotions and those of others, self-esteem, self-motivation, empathy, conflict resolution, life skills, social skills, understanding, and regulation of emotions. The thematic blocks are divided into two parts: (a) Intrapersonal competencies (directed at oneself): Emotional awareness, emotional regulation, emotional autonomy. (b) Interpersonal competencies (directed at others): Socio-emotional skills and life and well-being skills (Ezeiza *et al.*, 2008).

The studies and examples presented underscore the relevance of emotions in the educational field. Dalai-Lama & Ekman (2009) argued that while knowledge in an educational system is valuable and can lead to happiness, achieving this happiness requires an intelligent understanding of emotions. In line with this, Shahzada *et al.* (2011) suggest including emotional development in school curricula, as there is a correlation between academic performance and emotional intelligence.

Furthermore, emotional development fosters relationships and, therefore, it is relevant to consider emotionally educating individuals to achieve emotional competence. In this regard, Landry (2019) states there are four basic competencies of emotional intelligence: Self-awareness, self-management, social awareness, and relationship management.

Integrating Emotional Intelligence in Secondary Education

López (2012, p. 45) states that emotional intelligence should be applied from childhood and at any age, yet he cautions that in adolescence it is necessary "*autoafirmarse, valorar sus capacidades y limitaciones, tomar sus propias decisiones, tener responsabilidades, sentirse aceptados por los demás, etc.*"[19]. He, like Goleman (1996), Salovey & Mayer (1990), and Mayer, Salovey & Caruso (2012), agrees that emotional intelligence allows a person to better understand themselves and others. For this reason, López (2012) places great importance on the work that teachers do in the classroom with their students to build what he calls the "emotional and affective charge." He recommends starting with "their personal and social interests and needs and their direct experiences."[20] (p. 46). Among the didactic resources to use and how to set up the classroom, he mentions the following:

> *... (imágenes, fotografías, canciones, cuentos, literatura, juegos, vídeos, objetos, noticias de prensa, role- playing, etc.) que susciten la conciencia emocional y que ofrezcan la posibilidad de experimentar emociones. Conviene ofrecer espacios en el aula de reflexión y de introspección, fomentar la comunicación con los demás y trabajar en equipo.*

[19] Our translation: to assert oneself, assess one's abilities and limitations, make one's own decisions, take on responsibilities, feel accepted by others, etc.

[20] Our translation: their personal and social interests and needs and their direct experiences.

> *Es efectivo preparar espacios abiertos con sillas o cojines en los que, desde una cierta comodidad postural, se puedan exponer, compartir y vivenciar situaciones de aprendizaje emocional y favorezcan la comunicación visual y corporal de los alumnos. (p. 46).*

In secondary education, the goal is to go beyond the classroom to foster learning that is meaningful, pedagogically valuable, and applicable in students' daily lives, in their social environment, and with the people they interact with. An effective strategy to achieve this goal is the cross-curricular incorporation of emotional education in various subjects, curricular units, or areas of learning, ideally in as many of them as possible. Teachers play a crucial role as role models, enabling students to learn to develop their emotional intelligence through imitation. For this approach to succeed, it is imperative to establish a school environment where values such as respect, trust, love, solidarity, and empathy prevail. It's crucial for the teacher to be eloquent, meaning they have the ability to communicate ideas and emotions clearly, effectively, and persuasively, both orally and in writing, to inspire students and promote similar behavior in them.

To foster a comprehensive and effective learning environment, it is essential that the teacher develops their empathetic capacity towards students, establishing relationships of trust and cordiality. Being receptive to human contact not only facilitates affectionate communication but also builds positive interpersonal relationships. This approach requires that the teacher trains and sensitizes in emotional competencies as an indispensable preliminary step to impart quality emotional education. Courses, readings, and the exchange of experiences are excellent resources for this training. The teacher's role is especially relevant in implementing emotional education programs, as they are often the most immediate and constant reference for students throughout the week.

Emotional education, in turn, should be a continuous focus throughout schooling and offer various opportunities for the practice and application of these learnings. This should not be limited only to the school environment but should extend to the family, extracurricular activities, and leisure time. Ultimately, the goal is for the student's entire life experience to become a stage for developing their emotional competencies, as life itself is the best school for this type of learning.

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[21] Our translation: ... (images, photographs, songs, stories, literature, games, videos, objects, press news, role-playing, etc.) that raise emotional awareness and offer the possibility to experience emotions. It is advisable to provide spaces in the classroom for reflection and introspection, promote communication with others, and work as a team.

It's effective to prepare open spaces with chairs or cushions where, from a certain postural comfort, you can expose, share, and experience emotional learning situations and favor students' visual and bodily communication. (p. 46).

Conclusions

From the foregoing, it is concluded that emotional education is fundamental for the well-being of students and their academic performance. Teachers can incorporate it into various subjects and areas of learning to promote a comprehensive and effective learning environment.

To truly achieve the goal of educating students for a more just society with a sense of respect for others, it is necessary to develop trust, love, solidarity, and empathy in the classroom; these are essential to establish an appropriate school climate. This implies the implementation of practical strategies to promote the development of emotional intelligence in the classroom.

Lastly, it is concluded that regarding strategies to develop emotional intelligence in secondary education, the cross-curricular incorporation of emotional education in various subjects and areas of learning is essential.

References

Ashknasy, N. M.; Dasborough, M. T. (2003). Emotional Awareness and Emotional Intelligence in Leadership Teaching. *Journal of Education for Business*, 79, 18-22. DOI:10.1080/08832320309599082

Bain, S. K., McCallum, R. S., Bell, S. M., Cochran, J. L. & Sawyer, S. C. (2010). Foreign language learning aptitudes, attitudes, attributions, and achievement of postsecondary students identified as gifted. *Journal of Advanced Academics*, 22, 130-156. https://www.ejmste.com/download/the-impact-of-motivation-onstudents-academic-achievementand-learning-outcomes-inmathematics-among-4060.pdf

Bisquerra, R. (Coord.). Punset, E., Mora, F., García, N. E., López, C. É., Pérez, G. J. C., Lanttieri, L., Nambiar, M., Aguilera, P. Segovia, N. y Planells, O. (2012a). ¿Cómo educar las emociones? *La inteligencia emocional en la infancia y la adolescencia.* Esplugues de Llobregat: Hospital Sant Joan de Déu. https://www.observatoriodelainfancia.es/oia/esp/descargar.aspx?id=3483&tipo=documento

Bisquerra, R. (2012b). *De la inteligencia emocional a la educación emocional.* 24-35. En Bisquerra, R. (Coord.). Punset, E., Mora, F., García, N. E., López, C. É., Pérez, G. J. C., Lanttieri, L., Nambiar, M., Aguilera, P. Segovia, N. y Planells, O. ¿Cómo educar las emociones? La inteligencia emocional en la infancia y la adolescencia. Esplugues de Llobregat: Hospital Sant Joan de Déu. https://www.observatoriodelainfancia.es/oia/esp/descargar.aspx?id=3483&tipo=documento

Buitrago R. E. y Herrera L. (2013). Matricular las emociones en la escuela, una necesidad educativa y social. *Praxis & Saber*. 4(8), 87–108. doi: 10.19053/22160159.2653.

Bürgermeister, A., Ringeisen, T., & Raufelder, D. (2016). Fostering students' moderation compe-

tence: the interplay between social relatedness and perceived competence. *Teaching in Higher Education*, 21(8), 990– 1005. https://doi.org/10.1080/13562517.2 016.1209183

Carbonell, B. N., Cerezeo, R. F., Sánchez, E. S., Méndez, M. I. y Ruiz, E. C. (2019). Programa de convivencia e Inteligencia Emocional en Educación Secundaria. *Creatividad y sociedad: revista de la Asociación para la Creatividad*, 29, 62-82. http://creatividadysociedad.com/creatividad-y-emociones

Chang, Y. C. & Tsai, Y. T. (2022). The Effect of University Students' Emotional Intelligence, Learning Motivation and Self-Efficacy on Their Academic Achievement—Online English Courses. *Frontier in Psychology*, 13:818929. doi: 10.3389/fpsyg.2022.818929

Dalai-Lama, y Ekman, P. (2009). *Sabiduría Emocional.* Barcelona: Kairós.

Duchatelet, D & Donche, V. (2019). Fostering self-efficacy and self-regulation in higher education. *Higher Education Research and Development*, 38(1), 1-15. doi:10.1080/07294360.2019.1581143

Ezeiza, U. B., Izagirre, G. A. Y Lakunza, A. A. (2008). I*nteligencia emocional. Educación Secundaria Obligatoria 12-14 años. 1er ciclo.* Gipuzkoako Foru Aldundia. https://www.orientacionandujar.es/wp-content/uploads/2015/11/Programa-Inteligencia-Emocional-Secundaria-12-14-años.pdf

Fallahzadeh, H. (2011). The Relationship between Emotional Intelligence and Academic Achievement in medical science students in Iran. *Procedia - Social and Behavioral Sciences*, 30, 1451-1466. https://www.sciencedirect.com/science/article/pii/S1877042811021082

Goleman, D. (1996). *La inteligencia emocional.* Javier Vergara Editor.

Goleman, D. (2021). *Inteligencia emocional.* Kairos, Editorial.

Hamad, A. W., Rawdhan, A., Saleh, M., Alrimal, M., Alasmari, R., Alhamad, S., Estudiante, R., Aljebreenb, M., Alsubaieb, H., Farghaly, A. S. M. (2022). Correlation between emotional intelligence and academic achievement among undergraduate nursing students. I*nternational Journal of* Africa Nursing Sciences, 17, 1-6. https://www.sciencedirect.com/science/ article/pii/S2214139122000981

Karimi, L., Leggat, S. G, Donohue, L., Farrell, G. y Couper, G. E. (2014). Emotional rescue: The role of emotional intelligence and emotional labour on well-being and job-stress among community nurses. *Journal of advanced nursing*, 70(1), 176–186. https://onlinelibrary.wiley.com/doi/10.1111/jan.12185

Kbaribooreng, M., Hosseini, S., Zangouei, A, A. y Ramroodi, M. (2015). Relating emotional inte-

lligence and social competence to academic performance in high school students. *International Journal of Educational and Psychological Researches*, 1, 75-9.

Landry, L. (2019). Why emotional intelligence is important in leadership. Harvard Busines School. *Información Empresarial,* https://online.hbs.edu/blog/post/emotional-intelligence-in-leadership

Llibre, J., Prieto, A., García, L., Díaz, J., Viera, C, and Piloto, A. (2015). Influencia de la inteligencia emocional en los resultados académicos de estudiantes de las Ciencias Médicas. *Revista Habanera de Ciencias Médicas*, 14(2), 241-252. https://revhabanera.sld.cu/index.php/rhab/article/view/562#:~:text=Se%20observó%20una%20influencia%20significativa,p<%200%2C05).

López, C. E. (2012). Inteligencia emocional en el aula. pp. 45-55. En Bisquerra, R. (Coord.). Punset, E., Mora, F., García, N. E., López, C. É., Pérez, G. J. C., Lanttieri, L., Nambiar, M., Aguilera, P. Segovia, N. y Planells, O. *¿Cómo educar las emociones? La inteligencia emocional en la infancia y la adolescencia.* Esplugues de Llobregat: Hospital Sant Joan de Déu. https://www.observatoriodelainfancia.es/oia/esp/descargar.aspx?id=3483&tipo=documento

Martínez, M. A. M., López, L. R., Aguilar, P. J. M., Trigueros, R., Morales, G. M. J. & Rocamora, P. P. (2020). Relationship between Emotional Intelligence, Cybervictimization, and Academic Performance in Secondary School Students. *International Journal of Environmental Research and Public Health*, 17(21), 7717. doi: 10.3390/ijerph17217717.

Mayer, J. D., Salovey, P. & Caruso, D. (2012). *Models of Emotional Intelligence*. In Sternberg, R. J. Handbook of Inteligence - Cambridge University Press. www.cambridge.org/core/books/abs/handbook-of-intelligence/models-of-emotional-intelligence/939985F534A44268E9C5AD7B33036087

Molero, C., Saiz, E. & Esteban, C. (1998). Revisión histórica del concepto de inteligencia: una aproximación a la inteligencia emocional. *Revista Latinoamericana de Psicología*, 30(1), 11-30. https://www.redalyc.org/pdf/805/80530101.pdf?

Ordóñez, L. A., González, B. R., Montoya, C. I. and Schoeps, K. (2014). Conciencia emocional, estados de ánimo y rendimiento académico. *International Journal of Developmental and Educa*tional Psychology INFAD *Revista de Psicología*, 1(6), 229-236. https://revista.infad.eu/index.php/IJODAEP/article/view/738/675

Postigo, Z. S., Schoeps, K., Montoya, C. I. & Escartí, A. (2019). Emotional education program for adolescents (PREDEMA): evaluation from the perspective of students and effects on socio-affective competences. *Journal for the Study of Education and Development*, 42(2), 303-336. DOI: 10.1080/02103702.2019.1578925

Salovey, P. & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211.

Shahzada, G., Ghazi, S. R., Khan, A., Khan, H. N. & Shah, M. T. (2011). The relationship of emotional intelligence with the student's academic achievement. I*nterdisciplinary Journal of Contemporary Research Business*, 3(1), 994-1001.

Song, L. J., Huang, G. H., Peng, K. Z., Law, K. S., Wong, C. S & Chen Z. (2010). The differential effects of general mental ability and emotional intelligence on academic performance and social interactions. *Intelligence,* 38(1), 137-143. doi: 10.1016/j.intell.2009.09.003.

Schunk, D. H. (2012). *Teorías del aprendizaje. Una perspectiva educative*. 6a edición. Pearson Eucación.

Tella, A. (2007). The Impact of Motivation on Student's Academic Achievement and Learning Outcomes in Mathematics among Secondary School Students in Nigeria. *Eurasia Journal of Mathematics, Science and Technology Education*, 3(2), 149-156. doi: 10.12973/ejmste/75390

Titrek, O., Çetin, C., Kaymak, E. & Kaşikçi, MM (2018). Academic Motivation and Academic Self-efficacy of Prospective Teachers. *Journal of Education en Taining Studies*, l. 6, 77–82. https://redfame.com/journal/index.php/jets/article/view/3803

Thorndike, E. L. (1920). Intelligence and its use. *Harper's Magazine*, 140, 227-235.

Vidyarthi, P. R., Anand, S. & Liden, R. C. (2014). Do emotionally perceptive leaders motivate higher employee performance? The moderating role of task interdependence and power distance. *The Leadership Quarterly*, 25(2), 232–244. https://www.sciencedirect.com/science/article/abs/pii/S1048984313000817?via%3Dihub

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Transformative Leadership: Key to Success in Education

Liderazgo Transformacional: Clave del Éxito en Educación

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Sumary

Transformational leadership has become a fundamental concept in the educational field, making a difference in how educational institutions are managed and how educators influence student development. This leadership approach focuses on inspiring and motivating others to achieve common goals and objectives, fostering a positive and stimulating learning environment. In the context of education, transformational leadership has been revealed as an essential driving force behind educational success. We leave it up to the reader to consider the present article.

Keywords: transformational leadership, educational, educational institutions, student development, common goals and objectives.

Resumen

El liderazgo transformacional se ha convertido en un concepto fundamental en el ámbito educativo, marcando la diferencia en la forma en que las instituciones educativas son gestionadas y cómo los educadores influyen en el desarrollo de los estudiantes. Este enfoque de liderazgo se centra en inspirar y motivar a los demás para alcanzar metas y objetivos comunes, fomentando un ambiente de aprendizaje positivo y estimulante. En el contexto de la educación, el liderazgo transformacional se ha revelado como una fuerza impulsora esencial detrás del éxito educativo. Dejamos a consideración del lector el presente artículo.

Palabras clave: liderazgo transformacional, educativo, instituciones educativas, desarrollo de los estudiantes, metas y objetivos comunes.

Introduction

The following article focuses on transformational leadership in education and how a clear vision and strategic direction can be the key to success in the educational field. Firstly, the importance of considering the significance of teamwork is highlighted in order to establish collaborative learning environments and share knowledge among teachers. Additionally, the importance of sharing a clear and motivating vision for the future of the educational institution is mentioned, inspiring others and emphasizing positive values and celebrating achievements.

Secondly, the topic of empowerment and professional development is addressed, where the importance of facilitating opportunities for professional development and personal growth of team members is highlighted. Specific strategies such as training, workshops, and mentoring programs are mentioned to facilitate professional development.

Lastly, the need for an academic revolution is discussed, where learning intertwines with the ability to create, innovate, and lead change. Strategies to achieve transformational leadership in education are mentioned, such as creating a positive environment by promoting a culture of respect, inclusion, and collaboration, and establishing clear and specific goals for students and

the educational community as a whole.

Vision and Strategic Direction in Education

Vision and strategic direction play a crucial role in transformative leadership within the educational field. A clear vision not only provides a defined direction for the educational institution, establishing long-term goals that guide daily actions, but it also influences everyday decision-making. Transformative educational leaders must not only possess a strong vision but also effectively communicate it to all stakeholders, including educators, students, parents, and the wider community.

From this perspective, transformative leadership entails the presence of a charismatic leader with the ability to exert positive influence. Studies conducted by García *et al.* (2015) have confirmed the relationship between authentic leadership, group cohesion, identification, and the potential mediating effect of organizational justice. However, the crucial aspect is not limited to this alone. If we approach this issue from the teacher's perspective in the university setting, according to Robbins (2014, p. 347), this professional is expected to be a leader with the "*capacidad de influir en un grupo para que logren metas*". This approach underscores the crucial importance of the teacher in the educational field, becoming a determining factor that motivates students to learn and think in a problem-solving oriented manner in their everyday lives.

In this sense, the responsibility and significant impact that educators have in the holistic development of students are highlighted, guiding them towards the development of practical skills and the application of knowledge in real-life situations. Thus, the university professor emerges as a key agent in shaping an effective and goal-oriented educational process, where their influential leadership contributes to the achievement of academic and personal objectives.

In addition to clear vision, strategic leadership involves the implementation of plans and strategies that help achieve established objectives. Transformational leaders in education are proactive and creative in addressing challenges, identifying opportunities, and making informed decisions to improve educational quality. These leaders are not afraid to innovate and adopt new and effective pedagogical approaches that respond to the changing needs of students and society.

Several authors have explored this theme, offering approaches and theoretical frameworks that can guide educational leaders. Fullan (2001) emphasizes the importance of a shared vision and strong strategic direction in transforming schools, emphasizing that effective school leadership involves creating and communicating an appealing vision that motivates all key stakeholders to work together towards common goals.

[1] The particular disposition of each individual to choose the profession or trade they wish to study and pursue, based on their aptitudes, psychological and physical characteristics, and motivations.

Senge (1990), on the other hand, argues that a shared vision is achieved through a continuous process of organizational learning, where all stakeholders actively participate in creating and developing the vision. This approach is based on the idea that vision and strategic direction in education should be collaboratively built, taking into account the perspectives and contributions of all members of the educational community.

Gimeno (2008) highlights the importance of a strategic vision in education that responds to current social, cultural, and technological challenges and changes. He emphasizes the need for educational leaders to generate a vision that aligns with new demands and contexts, promoting a strategic direction that fosters continuous improvement of educational processes. This, as stated by Rojas *et al.* (2020, p. 243), requires "challenging followers to think and rethink how activities are carried out, fostering motivation, reinforcement, and the behavior of those involved."

Inspiration and Motivation of Educational Staff

Educational transformational leadership plays a crucial role in inspiring and motivating teachers, as it focuses on stimulating change, promoting development, and creating an environment that fosters both personal and professional growth for educators. The foundations of transformational leadership were first established by James MacGregor Burns. In his seminal work Burns (1978), he laid the groundwork for transformational leadership. He argued that this style of leadership is based on motivation and inspiration, going beyond mere transactional exchanges to focus on raising the aspirations and morale of followers. In an educational context, this approach involves cultivating a passion for teaching, fostering innovation, and promoting a deeper commitment to the educational mission.

Later, Bass (1985) expanded and refined Burns' ideas. In his work, he highlighted the importance of transformational leaders in inspiring their followers to transcend their personal interests in favor of higher goals. In the educational realm, this approach urges leaders to cultivate a shared sense of purpose, focusing on educational goals that go beyond academic outcomes and address the holistic development of students.

However, achieving this challenge is not easy in today's times, as new challenges constantly arise that demand different professional attitudes. That is why it is necessary to reflect and address problems in order to transform knowledge and solve issues. Therefore, today's leader must have a different profile than decades before, as they are expected to stay updated in knowledge, have strategic skills to manage groups, be able to communicate effectively, and make decisions. These aspects are considered essential to be successful and competitive leaders in today's world.

Dylan & Hargreaves (2016) emphasize the importance of creating a school culture where all teachers continuously develop themselves in order to achieve the success of all students. Transformational leadership emerges as key to inspiring and promoting change in teaching, fostering an environment where learning and constant improvement are fundamental values.

In this sense, the need for educational leaders who guide and motivate teachers, promoting an environment conducive to educational excellence, stands out. In this conception, transformational leadership can be a catalyst for teachers' continuous learning. Therefore, it is important to have leadership that fosters a culture of constant improvement, where educators feel supported and motivated to enhance their teaching practices.

An important aspect of transformational leadership is the way habits can influence our personal and professional lives. If we analyze the power of habits following Duhigg's perspective (2012), habits can influence the motivation and performance of educational staff, but strategies are required to change negative habits and promote positive ones.

In the dynamic academic and student environment, the transformational leader emerges as the architect of an educational revolution that transcends conventional classrooms. To illustrate this concept, let's imagine a scenario where universities are not only centers of knowledge but also authentic drivers of innovation. We are referring to a place where educational processes are constantly reinvented, allowing the flourishing of cutting-edge technologies and transforming the academic and community environment into a crucible overflowing with opportunities.

In this exciting journey, the transformational leader emerges as the catalyst that triggers significant changes. The pursuit of excellence goes beyond being a motto; it becomes a philosophy that drives the professional development of young people. We are referring to an education that goes beyond the classrooms, preparing students to be proactive agents and creators of innovative solutions.

In this context, universities not only play an educational role but also empower individuals. They become sources of inspiration for a generation that not only seeks to acquire knowledge but also yearns to transform its environment and confront the challenges of tomorrow. Thus, the need for an academic revolution arises, where learning intertwines with the ability to create, innovate, and lead change. The crucial thing is to prepare to be part of a community that not only dreams of the future but actively contributes to building it.

One way to achieve transformational leadership in education, based on our own teaching experience, is to:

- Create a positive environment: Promote a culture of respect, inclusion, and collaboration throughout the educational environment. This can be achieved through implementing anti-bullying programs, integration activities, and promoting open communication and respect among students, teachers, and administrative staff.

- Set clear goals: Define clear and specific goals for students and the educational community as a whole. These goals can be related to academic performance, behavior, participation in extracurricular activities, among others. By setting goals and monitoring their progress, students are motivated to adopt positive habits to achieve the established objectives.

- **Implement recognition and rewards programs:** Create recognition and rewards systems for students who demonstrate positive habits. This can include prizes, certificates, public recognition, or special privileges. These programs help motivate students and reinforce the positive habits that are desired to be fostered.

- **Promote personal responsibility:** Teach students about the importance of personal responsibility and making appropriate decisions. Foster self-discipline and self-evaluation so that students take responsibility for their own actions and learn to make positive choices.

- **Offer training and development programs:** Provide training and development programs for students, teachers, and educational staff that promote social, emotional, and intellectual skills. These programs can include conflict resolution workshops, communication skills, emotional intelligence, among others.

- **Encourage parental involvement:** Involve parents in the educational process and promote open and ongoing communication between the educational institution and families. Organize events and meetings to discuss relevant topics and provide support to parents in the education and upbringing of their children.

- **Model positive behaviors:** Leaders and educational staff should model positive behaviors and be role models for students. This includes consistency between what is said and done, as well as promoting positive values such as honesty, respect, and empathy.

- **Promoting autonomy:** Giving teachers the freedom to make decisions and control their own work, fostering a sense of responsibility and empowerment. This can contribute to an environment where transformational leadership can thrive, as individuals feel more connected to their work and have more space to express their creativity.

- **Mastery:** Intrinsic motivation is related to the desire to improve and grow. When leaders promote mastery, they allow team members to develop and perfect their skills. This approach can align with transformational leadership, as leaders are interested in the personal and professional development of their followers.

- **Purpose:** When people feel that their work has a purpose beyond simply earning a salary, they are more engaged. Transformational leadership often relies on a shared vision and a sense of collective purpose, so the intrinsic motivation that comes from having a purpose can fuel this type of leadership.

In the context outlined, Pink (2010) argues that intrinsic motivation, which is based on internal desire to perform an activity, is more effective than extrinsic motivation, such as that derived from rewards or punishments. Accordingly, the author suggests various tools and strategies aimed at fostering intrinsic motivation, which can be applied both in the general organizational context and specifically in the educational field. These strategies seek to promote autonomy,

skill development, and the definition of a clear purpose.

However, the most important aspect in any organization or team is understanding and communicating the "why" behind actions and goals. Leaders who are able to inspire their personnel through a meaningful purpose generate higher commitment and motivation. In this regard, Sinek (2009, p. 41) argue that: "*Todos los grandes líderes y organizaciones, independientemente de su tamaño o industria, actúan y se comunican desde adentro hacia afuera*"[2].

Promoting a Positive Learning Environment

Generating positivity in educational transformative leadership is crucial to inspire others, foster a positive learning environment, and achieve meaningful changes within the educational community. Here are some strategies that can help cultivate positive transformative leadership in the educational field:

- Promotion of open and transparent communication: In an educational institution, we promote open and transparent communication by providing space to listen to concerns and suggestions from team members and the educational community. In this context, we highlight the relevance of considering the perspectives of Hargreaves & O'Connor (2018), who emphasize the importance of working as a team to establish collaborative learning environments. Additionally, it is important to share knowledge among teachers and to learn from one another. Applying the principles of collaboration, trust, and communication contributes to building a culture of learning within the classroom. It is also vital to share information transparently so that everyone is informed about the objectives, challenges, and achievements of the transformation process.

- Inspiration and shared vision: From our experience, we firmly believe that in an educational institution, it is crucial to share a clear and motivating vision for the future. This practice helps all stakeholders understand the purpose and goals behind the proposed changes. Additionally, we consider it essential to inspire others by highlighting positive values and celebrating achievements, even small ones, throughout the transformation process.

  In our opinion, the key lies in fostering a mindset of lifelong learning among teachers, encouraging them to work as a team to share knowledge and pedagogical strategies. Creating a learning environment where teachers can interact, learn, and share ideas is fundamental. As suggested by Fullan (2001), having a clear and motivating vision is essential to guide change processes in educational institutions. Following Senge's pers-

[2] Our translation: All great leaders and organizations, regardless of their size or industry, act and communicate from the inside out.

pective (1990), shared vision stands out as one of the key components for creating learning organizations, as it can unite people towards common goals.

In this regard, we support the idea expressed by Kotter (1996) about the need to establish a clear and compelling vision as the first crucial step in any change process. Furthermore, we believe that a clear vision can guide assessment and improve learning. We also agree with Barber's argument (2013) that a compelling vision is essential to mobilize people towards specific educational goals.

- Empowerment and professional development: In an educational institution, opportunities for professional development and personal growth should be facilitated for team members. This can include training, workshops, and mentoring programs.

  Regarding this, Covey (2004) emphasizes the importance of empowering individuals to take responsibility for their own professional and personal development. In this context, opportunities for professional development are fundamental, and authors such as Senge (1990) advocate for the creation of organizational environments that foster continuous learning and personal growth.

  The trainings, workshops, and mentoring programs mentioned in the text are specific strategies to facilitate professional development. According to Tannenbaum & Yukl (1992), training and development are key elements in empowering employees, as they provide them with the necessary skills and knowledge to assume greater responsibilities. Additionally, mentoring, according to Kram (1985), contributes to the development of interpersonal skills and personal growth by providing guidance and support. They encourage active participation of educators in decision-making and implementation of changes, allowing them to feel integral part of the process.

- Culture of collaboration and mutual support: A culture where collaboration is valued and teamwork is fostered must be promoted. This may include creating spaces to share ideas and resources, providing emotional and professional support to team members, and recognizing and celebrating individual and collective efforts. In this sense, various authors support the importance of cultivating an environment that values and promotes collaboration.

  According to Robbins &Judge (2019), effective collaboration is a key component for improving team performance and achieving organizational objectives. These authors argue that a culture of collaboration not only involves working together on specific projects, but also continuously sharing ideas and resources.

  Likewise, Katzenbach & Smith (1993) highlight that teamwork is not only about the task itself, but also about the mutual support among team members. Positive interdependence among team members is also important, contributing to an environment where each individual feels supported.

Creating spaces to share ideas and resources aligns with Senge's (1990) perspective, who advocates for the importance of "shared mind." This concept involves building a collective vision and the ability of team members to share their knowledge and learn from each other.

Regarding emotional and professional support, authors like Maslach & Leiter (2016) point out that a work environment that provides emotional support reduces burnout and improves the psychological well-being of employees. The inclusion of this type of support helps strengthen the bonds among team members, generating a sense of belonging.

The recognition and celebration of individual and collective efforts, as mentioned by Pink (2010), are fundamental elements to motivate employees. Recognition is not only about tangible rewards, but also about acknowledging the effort and contribution to the achievement of common goals.

- **Recognition and celebration:** According to Byrd *et al.* (2017), in the educational context, public recognition of the achievements and contributions of educators, students, and other staff members is essential to strengthen cohesion and community spirit. Organizing events or ceremonies specifically designed to celebrate important milestones not only fosters a sense of accomplishment, but also demonstrates appreciation for the hard work performed by the educational community.

- **Flexibility and adaptability:** According to Zarkadakis (2021), flexibility and adaptability are essential leadership attributes in the current ever-changing world. A leader who shows flexibility in the face of challenges and changes is more capable of positively influencing their team and organization. This encourages innovation and continuous learning.

- **Taking care of well-being:** Literature indicates that an empathetic and well-being-conscious leader should prioritize the emotional and physical well-being of team members (Crawford, 2019). This is achieved through the implementation of policies and practices that support a healthy and balanced environment. Contributions from Marzano *et al.* (2018) and Marzano & Heflebower (2011) indicate that resilience can be fostered by providing resources and tools to help educators manage stress and job demands.

Development of Communication Skills and Active Listening

An aspect that is essential in educational transformational leadership is the transformational learning of communication and listening skills. These skills allow for the establishment and maintenance of effective communication with all members of the educational community.

Robbins & Judge (2017) state that effective communication is essential for leaders to convey their vision and goals, as well as to obtain feedback and understanding from others. Through clear and coherent communication, educational leaders can inspire their team and motivate

them to achieve common goals.

On the other hand, Covey (2004) points out the importance of active listening as an essential skill in leadership. Active listening involves understanding not only the words spoken by others, but also the underlying emotions and needs. As an educational transformational leader, it is important to listen attentively to teachers, students, parents, and other community members in order to understand their concerns and needs, and to make decisions and take actions accordingly.

The lack of communication skills and active listening can hinder transformational leadership in education for several reasons, such as:

- **It limits the ability to convey a clear vision:** Transformational leadership involves the ability to effectively communicate an inspiring vision that motivates others to work towards a common goal. If a leader lacks communication skills, they are likely to be unable to transmit their vision in a clear and persuasive manner.

- **It hinders the creation of trust relationships:** To lead in a transformational manner, it is crucial to establish trust relationships with team members. Lack of communication skills can hinder the building of trust, as others may perceive the leader as unresponsive or uninterested in their concerns and opinions.

- **It limits the exchange of ideas and feedback:** Active listening is a fundamental skill for a transformational leader. By actively listening to others, leaders can gather valuable information, generate new ideas, and make informed decisions. Lack of active listening skills can result in a one-way communication environment, where ideas and feedback are ignored or dismissed.

- **It hinders change management:** Transformational leadership involves managing and promoting change in the educational organization. To achieve this, it is important to be able to clearly communicate the benefits of the change, involve team members in the process, and effectively handle resistance to change. Lack of communication skills can hinder all stages of the change process.

Evaluation and Continuous Improvement in the Educational Context

Marzano (2005) emphasizes the importance of implementing an evaluative approach in education, in which school leaders actively engage in the evaluation and improvement process of their institution. This involves setting clear goals, collecting relevant data, and using it effectively to make informed decisions.

It is equally essential to use various tools and processes, such as classroom observation, standardized tests, and formative assessments, to measure student progress and evaluate the quality of teaching. School leaders must be able to analyze the results of these evaluations and

use them to identify areas for improvement and develop effective strategies to address them.

However, great importance should also be given to feedback and the continuous professional development of teachers. Therefore, school leaders should provide constructive feedback and offer growth opportunities to teachers so they can improve their teaching practice. This involves providing the support, training, and resources necessary to ensure quality learning for all students.

As for continuous improvement, Fullan (2001) points out that it is not limited solely to students' academic performance, but involves the participation of the entire educational community. In transformational leadership, it is essential to foster continuous improvement, not just by managing daily tasks, but by motivating, inspiring, and empowering others to achieve common goals.

Robinson *et al.* (2016), on their part, emphasize the relationship between transformational leadership and students' performance. This type of leadership creates a positive and supportive environment, enabling teachers to feel empowered and motivated to improve their teaching practice. Transformational leaders focus on setting clear goals, communicating expectations, fostering collaboration, and providing professional development opportunities. Numerous studies support the relationship between transformational leadership and improved educational outcomes, as these leaders have a learner-centered approach, establish high expectations, and provide the appropriate resources and support for teachers to enhance their practice.

Glickman (1987) cited by Glickman (2002) asserts that leaders live up to the expectations they have for others, being open and willing to be scrutinized on how they carry out their own professional work. Educators who cannot publicly practice continuous improvement over time must either leave voluntarily, relocate to a different environment, or be dismissed. Clearly, this is not an easy job!

Teachers who are deemed competent after the first cycle are asked to establish their own classroom teaching goals and professional growth plans. Subsequent observation cycles and conferences are no longer tied to evaluation but rather provide feedback on their growth plans.

Errors to Avoid in Transformational Leadership

As Villalba (2014) points out, there are several mistakes that are detrimental to establishing true transformational leadership in education. Firstly, some executives fail to recognize the importance of communication as an inherent responsibility of their position. Additionally, they do not consider the impact that their communicative actions can have on the organization.

Another common error is the lack of a unified discourse from the executives, resulting in obvious contradictions. This lack of coherence in the conveyed message creates conflicts that ultimately affect lower-level employees. Furthermore, some executives do not share the same vision as the organization, resulting in discrepancies and tensions in the work environment.

Similarly, it is concerning the lack of awareness of the effects of their actions on personnel. Many executives do not consider the repercussions of their behavior on the teaching staff, which can lead to demotivation and lack of commitment. Lastly, some executives solely focus on operational aspects when transmitting information, disregarding other relevant aspects for the educational institution.)

Conclusions

After addressing the topic, we conclude that transformational leadership goes beyond being a source of motivational inspiration, through the establishment of a charismatic role model and the articulation of a shared vision for the future. Additionally, we recognize and consider the individual differences among followers. Transformational leadership facilitates intellectual stimulation by questioning old assumptions and the status quo to foster creative thinking.

We also believe that the various mentioned authors provide approaches and concepts that allow us to understand the importance of a vision and strategic direction in education. These works can be used as theoretical references by educational leaders to guide our work and promote effective management of educational institutions.

We also believe that educational transformational leadership, according to the perspective of various authors over the years, presents itself as a solid framework to inspire and motivate educational staff. We, as leaders, not only focus on academic goals, but also aim for the holistic development of educators, creating an environment conducive to continuous learning and innovation in education.

Transformational leadership, backed by a clear vision and effective strategic direction, is essential for our success in the educational field. We, as transformational leaders, inspire, motivate, and empower educators and students, creating an environment conducive to learning and personal growth. By adopting a transformational approach, our educational institutions can achieve higher levels of academic excellence and prepare students for a promising future in an ever-changing world.

We also conclude that communication and active listening skills are essential in educational transformational leadership, as they allow us to establish effective communication, convey the vision and goals, motivate and inspire others, as well as understand the needs and concerns of the educational community. These skills are fundamental to generate an atmosphere of trust and cooperation and achieve the necessary transformation in the educational field.

Finally, we believe that creating a culture of collaboration and mutual support in our work environment, which includes facilitating spaces to share ideas, emotional and professional support, as well as recognizing individual and collective efforts, is supported by various authors who emphasize the importance of these elements for our organizational success and the well-being of team members.

References

Barber, M. (2010). *Deliverology 101: A Field Guide For Educational Leaders*. Publischer Corwin.

Covey, S. R (2004). *Los 7 hábitos de la gente altamente efectiva.* Paidós.

Crawford, C. B. (2019). *Building resilience in education: A guide to developing staff and students who flourish.* London: Bloomsbury.

Fullan, M. (2001). *Liderando en una cultura de cambio.* Editorial Paidós.

García, G, C., Molero, F., & Moriano, J. A. (2015). Authentic leadership and its influence on group cohesion and organizational identification: The role of organizational justice as a mediating variable. *Revista de Psicología Social,* 30(1), 60–88. https://doi.org/10.1080/02134748.2014.987539

Gimeno, S. J. (2008). *Educación y aprendizaje en una sociedad incierta.* Ediciones Morata.

Glickman, C. D. (2002). *Leadership for learning: how to help teachers succeed.* Association for Supervision and Curriculum Development. https://www.academia.edu/16591880/Leadership_for_Learning

Hargreaves, A., & O'Connor, M. T. (2018). *Collaborative Professionalism: When Teaching Together Means Learning for All.* Publischer Corwin.

Katzenbach, J. R., & Smith, D. K. (1993). *The Wisdom of Teams: Creating the High-Performance Organization.* Harvard Business Review Press.

Kotter, J. P. (1996). *Leading Change. Why Transformation Efforts Fail.* Harvard Business School Press.

Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life.* University Press of America.

Marzano, R. J. (2005). *School Leadership That Works: From Research to Results*. Editorial: ASCD.

Marzano, R. J., & Heflebower, T. H. (2011). *Reinventing teacher evaluation.* Corwin.

Marzano, R. J., Fink, T. M., & Heflebower, T. H. (2018). *Harnessing the power of observation to inform and transform teaching.* Corwin.

Pink, D. H. (2010). La sorprendente verdad sobre qué nos motiva. Editorial: Editorial Gestión 2000.

Robbins, E. (2014). *Liderazgo emocionalmente inteligente.* Editorial McGraw-Hill Interamericana.

Robbins, S. P. y Judge,T. A. (2017). *Comportamiento organizacional.* Pearson.

Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2016).El impacto del liderazgo en los resultados escolares. OECD Education Working Papers, 58. *REICE. Revista Iberoamericana sobre Calidad Eficacia y Cambio en Educación*, 12(4). https://doi.org/10.15366/reice2014.12.4.00

Rojas, C. O. A., Vivas, E. A. D., Mota, S. K. T. y Quiñonez, F. J. Z. (2020). El liderazgo transformacional desde la perspectiva de la pedagogía humanista. ***Sophia, Colección de Filosofía de la Educación,*** 28, pp. 237-262. https://www.redalyc.org/journal/4418/441861942010/441861942010.pdf

Senge, P. (1990). *La quinta disciplina: cómo fomentar el aprendizaje en la organización.* Granica.

Sinek, S. (2009). Start With Why: How Great Leaders Inspire Everyone to Take Action. Portafolio.

Tannenbaum, R., & Yukl, G. (1992). Training and development in work organizations. *Annual Review of Psychology*, 43(1), 399-441. https://www.annualreviews.org/doi/abs/10.1146/annurev.ps.43.020192.002151

Villalba, J. (2014). Liderazgo transformacional y comunicación. Blog *Think Big / Empresas*, 22 octubre, 2014. https://empresas.blogthinkbig.com/liderazgo-transformacional-y-comunicacion/

Robbins, S. P., & Judge, T. A. (2019). Understanding the Burnout Experience: Recent Research and Its Implications for Psychiatry. *World Psychiatry,* 15, 103-111. https://doi.org/10.1002/wps.20311

Byrd, D., Simon, L. & Brown, B. (2017). Creating communities of practice to sustain professional learning. *Educational Leadership*, 74(8), 18-22. https://doi.org/10.1177/0013162417708001

Zarkadakis, G. (2021). *The Future of Leadership: Rise of AI, Robotics and Ethics.* Kogan Page Publisher

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Relationship between vocational guidance and multiple intelligences: an inseparable scientific perspective

Relación entre orientación vocacional e inteligencias múltiples: una perspectiva científica inseparable

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Abstract

The article deals with the relationship between vocational guidance and multiple intelligences. People can experience and explore different career options and paths, which involves conducting research, talking to people working in different industries, doing internships or professional practice, and engaging in personal and professional development activities. It is necessary for the activities and decisions made during this process to be in line with the student's goals and objectives, so as to generate a sense of coherence and purpose in their developmental path. However, most of the time, this responsibility is left in the hands of the students. Teachers, counselors, or career advisors in educational institutions make little effort to develop guidance that promises better achievements for students when choosing their college major. In this sense, the article analyzes vocational guidance from the perspective of different theories and how a better purpose can be achieved if Howard Gardner's theory of multiple intelligences is considered in relation to vocational guidance and choice. Finally, some practical resources for making educational decisions are mentioned.

Keywords: Vocational guidance, vocational choice, substantive theories, multiple intelligences.

Resumen

El artículo trata sobre la relación entre la orientación vocacional y las inteligencias múltiples. Las personas pueden experimentar y probar diferentes opciones y caminos profesionales, lo que implica realizar investigaciones, hablar con personas que trabajan en diferentes industrias, realizar pasantías o prácticas profesionales, y participar en actividades de desarrollo personal y profesional. Es necesario que las actividades y decisiones tomadas durante este proceso estén en consonancia con los objetivos y metas del estudiante, de manera que se genere un sentido de coherencia y propósito en su camino de desarrollo. Sin embargo, la mayoría de las veces esta responsabilidad se deja en manos de los estudiantes. Los docentes, consejeros u orientadores de las instituciones educativas poco esfuerzo hacen por desarrollar una orientación que augure mejores logros en los estudiantes al momento de elegir su carrera universitaria. En este sentido el artículo analiza la orientación vocacional desde la perspectiva de diferentes teorías y como se puede lograr un mejor propósito si se considera la teoría de las inteligencias múltiples de Howard Gardner en relación con la orientación y elección vocacional. Finalmente, se mencionan algunos recursos prácticos para tomar decisiones educativas.

Keywords: Keywords: Vocational guidance, vocational choice, substantive theories, multiple intelligences.

Introduction

Choosing a career is one of the most important decisions a person can make in their life. However, many times this choice is made without considering the skills and abilities of each individual, which can lead to job and personal dissatisfaction. That is why vocational guidance has become a fundamental tool to help individuals discover which activity or profession brings them the greatest satisfaction and personal fulfillment. In this context, Howard Gardner's theory of multiple intelligences has gained great relevance, as it acknowledges that each individual has unique strengths and abilities that should be taken into account when choosing a career. This article will explore the relationship between vocational guidance from various theories such as multiple intelligences and present some practical tools for making informed educational decisions.

Vocational Guidance

Vocational guidance is a fundamental process in every individual's life, as it involves a deep understanding of oneself to discover which activity or profession brings the greatest satisfaction and personal fulfillment. Before delving into this process, it is essential to understand what vocation itself means.

The term *vocation* comes from the Latin word vocare, which means "*alling* or *act of calling* In this sense, vocation refers to an individual's inclination toward a specific action or activity, in which one aspires to achieve a maximum level of fulfillment. This inclination can be artistic, professional, or occupational and constitutes an internal force that drives us toward a specific goal.

D'Egremy (2022, p.7) defines vocation as *"la disposición particular de cada individuo para elegir la profesión u oficio que desea estudiar y ejercer, de acuerdo con sus aptitudes, características psicológicas, físicas y motivaciones"*[1]. In this sense, the process of choosing a career and professional development is crucial in a person's life, as the choice of a career or profession can have a significant impact on job satisfaction, personal development, and overall well-being. It is important to choose a career that aligns with the interests, abilities, and values of each individual, as this will contribute to their success and happiness in the workplace.

Vocational guidance plays a key role in this process by providing tools and resources for individuals to explore and know themselves, identify their strengths and weaknesses, and understand their interests, values, and professional goals. Additionally, vocational guidance provides information about different career options, job trends, educational requirements, and professional development opportunities.

[1] Our translation: The particular disposition of each individual to choose the profession or trade they wish to study and pursue, based on their aptitudes, psychological and physical characteristics, and motivations.

Vocational guidance also helps individuals overcome doubts, indecision, or fears that may arise during the career choice process. It provides a safe and confidential space for individuals to express and explore their concerns and receive support and guidance.

However, according to Vidales (2013), there are other perspectives that focus on the well-being associated with the performed activity, that is, being led toward a purpose or destination. In this sense, being vocationally located implies carrying out work in a pleasant, interested, and efficient manner, providing joy, kindness, and attention to those with whom one works or offers professional services.

Additionally, according to the Ministry of Education of Peru (2013), vocation is a process that begins in the early stages of children's development through an understanding of their environment, the diversity of games, and explorations that influence their future vocation. This process involves the formation of values, the development of identity, self-esteem, and personality, as well as the discovery of appropriate capacities. In this way, vocation is intertwined with the opportunities and limitations of reality.

Importance of Vocational Guidance in the Career Choice Process

Vocational guidance plays a fundamental role in the career choice process as it helps individuals make informed decisions about their academic and professional future. Correspondingly, vocational choice is a complex process that involves the consideration of various internal and external factors. Firstly, a person's interests and abilities play a fundamental role in choosing a profession. It is important that the individual is attracted to and has the ability to perform tasks and activities associated with the chosen career. Additionally, values and personality must also be considered, as a profession should align with the individual's principles and way of being. Heppner, *et al.* (1994) emphasize the importance of interests, abilities, and social values in vocational choice.

However, these internal factors are not the only ones that influence vocational choice. External factors, such as gender and socioeconomic level, also play a role. Professional stereotypes and cultural expectations can limit an individual's career options, especially in societies where certain careers are deemed more suitable for men or women. Ducoing (2005) asserts that gender, socioeconomic level, and professional stereotypes deeply rooted in society are of particular relevance. Additionally, socioeconomic status can influence the possibility of accessing certain professions, as some require a significant financial investment. Gonzalez & Lessire (2005) add to the list of determining influences gender, socioeconomic origin, as well as pressures exerted by the family environment and close friendships.

Vocational choice also aims to find a profession where an individual can fully develop and leverage their abilities and talents. It is important for a person to find a career that allows them to express themselves and grow both personally and professionally. Additionally, it is necessary to consider demand and space in the economically active population. Choosing a profession with low demand or few job opportunities makes little sense, as it could hinder career develop-

ment and have negative consequences on the individual's economic life. Studies by De Garay (2001) and De La Mano & Moro (2013) have reported that the personal, professional, and academic goals of students play a significant role in this choice.

There are studies that assign great importance to vocational guidance in career choice. In this regard, Yamada & Castro (2013) have found that a significant percentage of higher education graduates regret the decision they made to pursue a university career. Quispe (2014) emphasizes the importance of a choice in line with each individual's vocational guidance as a way to avoid and prevent future dissatisfaction and frustration in students.

Theories and Approaches Relevant to Vocational Guidance

There are several relevant theories and approaches in the field of vocational guidance. Some of the most notable ones include:

- Career Development Theory: According to the theory proposed by Donald Super, the vocational choice process occurs throughout life and is influenced by various factors such as personality, interests, skills, and the socioeconomic environment. Super (1968) contends that professional development is divided into two stages: the growth stage and the exploration stage.

  In the growth stage, which spans from birth to 14 years old, exploration, information search, and identification take place. During this period, individuals seek references from significant figures in their environment, such as school, family, and the community, among others. These figures play an important role in self-discovery and the development of self-concept. In this stage, occupational preferences are more related to the person's emotional needs rather than their professional skills and interests. Additionally, these preferences tend to change over time.

  According to Busot (1995), the growth stage is divided into the following phases: (*a) Fantasy Stage:* From birth to 11 years old, characterized by the pursuit of pleasure, attraction to power-related activities, distortion of time perception, lack of objectivity, quest for adventures, excitement, and questioning of fantasy. *(b) Interest Stage:* Manifests between 11 and 12 years old, during which interests based on the individual's personal preferences develop and may change unstably. Additionally, contact with occupational reality begins, and it is understood that decision-making should be based on one's own motivations and interests. *(c) Capacity Stage:* Extends from 13 to 14 years old, representing the moment when individual aptitudes and capacities consolidate as they are put into practice through various activities such as games, sports, household and school tasks. Furthermore, the individual's self-concept strengthens.

  As for the exploration stage, it refers to the process of researching and discovering an individual's interests, skills, values, and personality. This stage is part of Super's career development

model, which also includes the growth, establishment, maintenance, and decline stages.

During the exploration stage, individuals typically have the opportunity to experiment with and try out different professional options and paths. This involves conducting research, talking to people working in different industries, participating in internships or professional practices, and engaging in personal and professional development activities. Researchers like Morán *et al.* (2012) maintain that this stage occurs between the ages of 15 to 24. During this period, individuals test behaviors developed in the previous stage, and the performance of roles in both fantasy and reality combines to try to fulfill the most important vocational task of adolescence: defining the problem of choice. This means that adolescents seek to strengthen their skills and abilities but also may modify and readjust their self-concept as they play different roles.

In Colombia, Super's theory can be applied to explain the professional development process at different stages of education. In Secondary Education, spanning from ages 11 to 14, adolescents dedicate themselves to discovering and assimilating values, interests, and needs. During Middle Education, covering ages 15 to 16, and Higher Education, ranging from ages 17 to 21, young people seek information about educational opportunities and university careers.

- Motivation Theory: Initially advocated by Maslow, his hierarchy of needs theory establishes that people have different levels of needs, ranging from the most basic (physiological) to the most complex (self-actualization). According to Maslow, people are motivated to satisfy these needs in a hierarchical order. Cano (2008) argues that Maslow's theory conceives motivation from a humanistic perspective, creating a hierarchy of human needs that are satisfied in a specific order.

  Motivation theory and vocational guidance are related in the sense that both focus on understanding and explaining the factors that influence people's decisions and behaviors regarding their career or work.

  Motivation theory refers to the study of the psychological processes that drive and direct human behavior. It examines how needs, desires, goals, and expectations affect how people are motivated and respond to different stimuli and situations.

  Vocational guidance, on the other hand, aims to help individuals make informed and satisfying career decisions. This involves exploring and understanding individual skills, interests, personality, and values, as well as the demands and opportunities present in the work environment. The main goal of vocational guidance is to help individuals find a job or career that aligns with their characteristics and personal goals.

  In this regard, motivation theory can be applied in vocational guidance to understand what factors motivate individuals to choose a specific career or profession. For instance, someone

may be motivated by the pursuit of success and recognition, while another may be motivated by passion or the desire to contribute to society. Understanding these motivations can help counselors guide individuals toward careers that are meaningful and satisfying for them.

Furthermore, motivation theory can also provide tools and strategies to promote motivation and engagement in career development. This may include setting clear goals, fostering self-determination and autonomy, providing positive feedback, and creating a work environment that promotes satisfaction and personal growth.

It is worth noting that in educational guidance, it is necessary to consider both internal and external motivation proposed by McClelland and Atkinson. The relationship between educational guidance and internal and external motivation lies in the fact that educational guidance can influence students' motivation. Educational guidance can assist students in developing internal motivation by providing them with information, emotional support, and practical resources to make educational decisions. For example, counselors or advisors can help students identify their interests and strengths and connect with educational opportunities that align with their personal goals. Finally, educational guidance can also influence external motivation in students by providing them with incentives and external rewards. For instance, educational guidance may offer scholarships, awards, or recognition to students who achieve certain academic objectives.

Theory of the Activation Model of Vocational and Personal Development or Interacting Models (MID).

This theory, proposed by Pelletier, is based on the idea that career development and personal identity are interconnected and mutually influential. Pelletier (1978) points out that vocational choice is the result of an evolutionary process that requires continuous educational practice, the construction of a professional and personal project, and an understanding of the necessary possibilities to carry it out.

The central premise of the theory lies in the activation of vocational and personal development through three main processes: *(a) Cognitive Activation:* This process involves acquiring the knowledge and skills necessary for making vocational and personal decisions. It includes the development of self-awareness, exploration of interests and values, acquiring information about career options, and assessing personal skills. *(b) Motivational Activation:* In this process, the goal is to increase motivation for both career and personal development. This would involve setting clear goals, establishing a connection between personal and vocational goals, and seeking self-efficacy to achieve those goals. *(c) Contextual Activation:* This process focuses on the environment and resources available to the individual. It includes social support, learning opportunities, access to information, and organizational policies and practices that can impact vocational and personal development.

Romero notes that vocational guidance is divided into four phases with different tasks and specific skills: *(a) Exploration Phase:* During this stage, the individual is exposed to new experiences

and information related to their education. *(b) Crystallization Phase:* In this stage, a general idea of the guidance process is formed, and a potential vocational project is considered. *(c) Specification Phase:* At this point, the individual faces possibilities and limitations, analyzing and specifying their personal project. What is desirable is evaluated against what is likely. *(d) Realization Phase:* This stage involves commitment and responsibility to the decision made, as well as planning strategies to carry out the established project.

On the other hand, it is essential to highlight that the guidance process is based on three fundamental principles: *(a) Experiential Principle:* According to Pelletier (1978), knowledge is acquired through the individual's sensory experiences, making experience more relevant than passive information received. Guidance should focus on providing a high level of experience. Additionally, according to Romero (1994), this principle involves considering attitudes, emotions, personal or external needs, intentions, and values in the guidance process. *(b) Heuristic Principle:* Romero (1994) asserts that this principle emphasizes the active cognitive inquiry of the individual and their autonomy as a subject in the decision-making process. The active participation of the individual allows them to determine why something is good for their project, generating a sense of competence and autonomy. *(c) Integrative Principle:* Both Pelletier (1978) and Romero (1994) agree that this principle involves finding meaning in the actions undertaken during the guidance process.

Furthermore, there are three essential principles underpinning the guidance process: *(a) The Experiential Principle*, according to Pelletier (1978), knowledge is acquired through the individual's sensory experiences, placing greater emphasis on experience than on passive information received. Therefore, guidance should focus on providing a high level of experience. Romero (1994) adds that taking into account attitudes, emotions, personal or external needs, intentions, and values in the guidance process is crucial. *(b) The Heuristic Principle*, according to Romero (1994), emphasizes active cognitive inquiry by the individual and their autonomy as a subject in the decision-making process. The active participation of the individual allows them to determine for themselves what is most suitable for their project, generating a sense of competence and autonomy. *(c) The Integrative Principle*; Pelletier (1978) and Romero (1994) affirm that finding meaning in the actions undertaken during the guidance process is necessary. Activities and decisions made during this process should align with the individual's objectives and goals, creating a sense of coherence and purpose in their development path.

Regarding the integrative principle, Pelletier (1978) asserts that there are two ways to achieve it: *(a) Signification:* refers to giving meaning to each experience lived in the present and integrating it into the entirety of the individual's life, focusing on relevant aspects that may have been ignored or unknown previously. *(b) Direction:* Refers to the negative, positive, or neutral evaluation that can be given to the experience.

Theory of Multiple Intelligences in Relation to Vocational Guidance and Choice

Howard Gardner has proposed the existence of various types of intelligence. According to this researcher, each of these types of intelligence acts independently in an individual. Gardner (1993)

asserts that intelligence should not be viewed as a single, generalized capacity but as a combination of different skills and competencies. The author initially identified seven different intelligences that interact with each other, namely linguistic intelligence, logical-mathematical intelligence, spatial intelligence, musical intelligence, bodily-kinesthetic intelligence, interpersonal intelligence, and intrapersonal intelligence.

Linguistic Intelligence: The ability to use language effectively, including understanding, analyzing, and producing written and oral texts.

Logical-Mathematical Intelligence: The ability for logical reasoning, abstract thinking, solving mathematical problems, and understanding scientific principles.

*Spatial Intelligence: I*nvolves the ability to perceive and manipulate visual and spatial information, as well as solving problems related to space and orientation.

Musical Intelligence: The ability to appreciate, compose, and produce music, as well as perceive and recognize musical elements.

Bodily-Kinesthetic Intelligence: Involves the ability to use the body expertly and coherently, as seen in athletes, dancers, or surgeons.

Interpersonal Intelligence: Refers to the ability to understand and relate effectively to others, as well as perceive and respond to others' emotions and motivations.

Intrapersonal Intelligence: Refers to the ability for self-awareness, self-control, self-evaluation, as well as understanding one's own feelings, needs, and goals.

Later, Gardner (2001, 2011) added two more intelligences to his list: naturalistic intelligence, referring to the ability to classify and relate to elements of nature, and existential intelligence, related to reflecting on fundamental questions of human existence.

Gardner's multiple intelligences can be related to vocational guidance and choice in several ways:

Self-awareness: Intrapersonal intelligence refers to the ability to understand and manage our own emotions, goals, strengths, and weaknesses. This intelligence is crucial in vocational choice as it involves being aware of our preferences, interests, and abilities, which can help identify careers that align well with us.

Interpersonal Relationships: Interpersonal intelligence consists of the ability to understand and relate effectively to others. This intelligence is important in vocational choice, as many careers require teamwork skills, effective communication, and building strong relationships with others.

Specific Skills: Gardner's different multiple intelligences are related to specific skills that may be relevant

to certain careers. For instance, musical intelligence may be important in choosing a career in music or the arts, while logical-mathematical intelligence may be relevant to careers in engineering or science.

Diversity of Options: The theory of multiple intelligences recognizes that each individual has unique strengths and abilities. This implies that not all careers are suitable for everyone. Vocational choice based on multiple intelligences allows for considering a wide range of professional options and finding those that best match each individual's strengths and abilities.

How can Gardner's theory of multiple intelligences be employed in guiding the vocational choices of young individuals?

Gardner's theory of multiple intelligences can be used to guide the vocational choices of young individuals in several ways:

Identifying Strengths and Weaknesses: It is crucial to identify the strengths and weaknesses of each individual. The theory of multiple intelligences suggests that each person has different types of intelligence, such as linguistic, logical-mathematical, musical, interpersonal, intrapersonal, spatial, naturalistic, and bodily-kinesthetic. By assessing the skills and preferences of each young person in relation to these intelligences, their strengths and weaknesses in different areas can be identified. Tests that determine the type of intelligence of the student can be employed for this purpose.

Providing Career Options Matching Predominant Intelligences: Once the predominant intelligences of an individual have been identified, career options or professional fields that leverage those skills can be provided. For example, if a student has outstanding musical intelligence, they might consider careers in music, music production, or music education.

Adapting Teaching and Evaluation Methods: By knowing the predominant intelligences of young individuals, vocational counselors can adapt teaching and evaluation methods to meet their individual needs. For example, if a student has outstanding spatial intelligence, they might benefit from practical and visual activities rather than solely reading written information.

Encouraging Self-awareness and Exploration: The theory of multiple intelligences can help young individuals better understand their own strengths and weaknesses, allowing them to make more informed decisions about their professional future. Exploring different areas of intelligence through activities and experiences can also help young individuals discover new interests and skills.

Conclusions

It is concluded that, in Donald Super's theory, vocational choice is a continuous process influenced by elements such as personality, interests, skills, and the socio-economic environment. During the growth stage, spanning from birth to 14 years, exploration and information-seeking take place, where occupational preferences are more related to the emotional needs of the in-

dividual. The objective of this stage is to help individuals gain a deeper understanding of themselves and the various occupational options available. Additionally, it enables them to identify and adjust their goals and objectives as they acquire more information and experiences.

We believe that the theory of motivation and vocational guidance are related because both focus on understanding and facilitating individuals' decisions and behaviors regarding their careers or jobs. Both fields can mutually benefit by using motivation principles and concepts to inform and enhance the vocational decision-making process.

Similarly, we conclude that career choice is a process divided into two stages: the growth stage and the exploration stage. During the exploration stage, individuals can experiment with different professional options, involving research, conversations with professionals in various industries, internships, and participation in personal and professional development activities. Activities and decisions made during this process should align with the individual's goals and objectives, generating a sense of coherence and purpose in their developmental path.

We conclude that the theory of multiple intelligences recognizes that each individual possesses unique strengths and abilities, implying that not all careers are suitable for everyone. Vocational choice based on multiple intelligences allows for considering a broad range of professional options and finding those that best align with each individual's strengths and abilities. Therefore, it is important for individuals to identify their strengths and weaknesses to choose a career that enables them to fulfill their full potential.

Finally, we conclude that there are various practical tools that can help individuals make informed educational decisions, such as multiple intelligences tests, interest and skills questionnaires, and interviews with professionals from different industries. These tools allow individuals to understand their strengths and weaknesses, as well as the professional options that best align with their skills and goals. Therefore, it is crucial for individuals to use these tools for making informed and satisfactory educational decisions. The teacher or vocational guidance facilitator should strive to consider the personal characteristics, interests, skills, and abilities of students and, accordingly, develop vocational guidance for the students.

References

Busot, J. A. (1995). *Elección y Desarrollo Vocacional.* Ediluz.

Cano, C. M. (2008). Motivación y elección de carrera. *Revista Mexicana de Orientación Educativa*, 5(13), 6-0. http://pepsic.bvsalud. org/pdf/remo/v5n13/v5n13a03.pdf

D'Egremy, A. F. (2022). *Cómo descubrir tu vocación.* España: Anaya.

De La Mano, M. and Moro, C. M.. (2013). *Motivaciones en la elección de la carrera universitaria: metas y objetivos de los estudiantes de Traducción y Documentación de la Universidad*

de Salamanca. Salamanca: Ediciones de la Universidad de Salamanca.

Ducoing, P. (. (2005). *Sujetos, actores y procesos de formación*. México, DF, México: Consejo Mexicano de Investigación Educativa. https://es.scribd.com/doc/3355 7860/COMIE-Actores-y-procesos-de-formacion-Tomo-II-estado-del-conocimiento

González, B. J.and Lessire, O. (2005). Aspectos más recientes en orientación vocacional. *Revista Iberoamericana de Educación*. www.rieoei.org/ deloslectores/876Gonzalez.PDF

Heppner, M. J., Hinkelman, O. J., & Humphrey, C. F. (1994). Shifting the Paradigm: The use of Creativity in Career Counseling. *Journal of Career Development*, 21(1), 77-86. https://link.springer.com/article/ 10.1007/BF02117430

Ministerio de Educación. (2007). *Manual de Tutoría y Orientación Educativa*. Lima: Autor. https://data.miraquetemiro.org/sites/default/ files/documentos/MANUAL%20DE%20TUTORIA%20%20Y%20ORIENTACION%20EDUCATIVA%20copy.pdf

Pelletier, D. (1978). L'approche opératoire du développement personnel et vocationnel: ses. Canadian *Journal of Counselling and Psychotherapy*, 12(4), 207-2017. de https://cjc-rcc.ucalgary.ca/article/view/60195/45557

Romero, R. S. (1994). Orientación vocacional no discriminatoria. Propuestas desde el modelo de activación del desarrollo vocacional y persona. En M. Irradier (Ed.), *Orientación académico-vocacional para una toma de decisión no discriminatoria* (págs. 25-38). EMAKUNDE / Instituto Vasco de la Mujer. https://dialnet.unirioja.es/servlet/articulo?codigo =3143950

Vidales, I. (2013). *Nuevas prácticas de orientación vocacional*. México, DF: Trillas. https://www.scribd.com/document/37027 0279/Libro-Nuevas-Practicas-de-Orientacion-Vocaional-de-Ismael-Vidales-Delgado

Quispe, Z. M. (2014). *Motivos ocupacionales y autoconcepto en la elección de carrera*. Tesis para optar por el título de Licenciada en Psicología con mención en Psicología Educacional que presenta la Bachiller. https://tesis.pucp.edu.pe/repositorio/bitstream/ handle/20.500. 12404/5549/QUISPE_ZUNIGA_MELISSA_MOTIVOS_OCUPACIONALES. pdf?sequence= 1&isAllowed=y

Yamada, G. and Castro, F. J. (2013). *Calidad y acreditación de la Educación Superior: retos urgentes para el Perú*. Lima: Universidad del Pacífico - Consejo de Evaluación, Acreditación y Certificación. https://repositorio.up.edu.pe/bitstream/handle/11354/1916/Yamada Gustavo2013.pdf

Essays

The Legal Framework of the educational system: Foundations and Hierarchy

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Abstract

The present academic essay explores the legal framework of the education system in Venezuela. The importance of the Constitution as the supreme norm that serves as a starting point for the development of other laws is highlighted, and it is emphasized that all norms must respect the hierarchical order and be in accordance with the Constitution. The essay also addresses the Organic Law of Education, which establishes the guiding principles and values of education, the organization and functioning of educational institutions, student evaluation, teacher training, and other crucial aspects of education. Furthermore, the essay discusses the transcendental role of the legal framework in the Venezuelan educational context, elevating it to the status of a fundamental pillar of society. The author uses the guiding documents of Fernandez and the wise suggestions of Delgado to structure and develop the academic essay.

Keywords: Legal framework, Venezuelan education system, legal basis.

Resumen

El presente ensayo académico explora el marco legal del sistema educativo en Venezuela. Se destaca la importancia de la Constitución como la norma suprema que sirve como punto de partida para el desarrollo de otras leyes, y se enfatiza que todas las normas deben respetar el orden jerárquico y estar en concordancia con la Constitución. El ensayo también aborda la Ley Orgánica de Educación, que establece los principios y valores rectores de la educación, la organización y funcionamiento de las instituciones educativas, la evaluación de los estudiantes, la formación de docentes y otros aspectos cruciales de la educación. Además, el ensayo analiza el papel trascendental del marco legal en el contexto educativo venezolano, elevándolo al estatus de pilar fundamental de la sociedad. El autor utiliza los documentos rectores de Fernández y las sabias sugerencias de Delgado para estructurar y desarrollar el ensayo académico.

Palabras clave: Ordenamiento jurídico, sistema educativo venezolano, bases legales.

The Legal System of the Educational System: Foundations and Hierarchy

In the pages that follow, an exciting journey into the heart of the Venezuelan educational system is undertaken, where normative hierarchy stands as the guardian of coherence and legality that underpin the national legal framework. The starting point is found in Fernández's guiding documents (2023a, 2023b). In these documents, the transcendental role of the legal system in the Venezuelan educational context is illuminated, elevating it to the status of a fundamental pillar of our society.

Throughout this journey, this essay immerses the reader in an ocean of solid arguments that form the pillars supporting the presented claims. Despite the density of the topic, the essay reveals the crucial contribution of the legal system to the construction of an environment imbued with justice and respect for human rights, with a special focus on education. To ensure

the excellence and coherence of this work, the guiding center is the wise advice of Delgado (s.f), who provides the necessary guidelines for structuring and developing a high-caliber academic essay.

From what has been exposed, it is important to emphasize that the Venezuelan legal framework plays an essential role in the educational system, as it constitutes the main reference to determine the rights and duties of individuals in the educational context. This legal framework enables individuals to exercise their subjective rights. The State, in turn, has specific responsibilities in the educational field, while citizens, as active subjects, enjoy the human right to education by engaging in the country's different educational institutions.

Secondly, it is crucial to highlight that the Venezuelan legal system ensures the right to education. The Constitution of the Bolivarian Republic of Venezuela (1999), in particular, establishes education as a fundamental and universal right for all citizens. This means that every individual has the right to access quality education, regardless of their social, economic, or ethnic background.

Thirdly, the legal framework establishes the rules and regulations governing the Venezuelan educational system. This includes laws, decrees, regulations, and policies that determine the structure, organization, and functioning of educational institutions, as well as the rights and duties of teachers, students, and parents.

A fourth aspect is that the legal framework provides the legal basis for the promotion of quality and equity in education. This includes the regulation of academic standards, the assessment of school performance, and the implementation of policies for inclusion and non-discrimination in the educational system.

A fifth argument to consider relates to the legal framework and its essential function as a provider of the legal foundation supporting the planning and development of the educational system in Venezuela. This function encompasses aspects such as the formulation of study plans and programs, the establishment of new educational institutions, and the promotion of research in the educational field.

The sixth argument is that the legal framework is a fundamental element in any organized society, as it establishes the rules and norms that govern the coexistence of its members. It consists of a set of legal norms that regulate social relations in a specific place and time. This legal framework is essential to ensure peace, justice, and respect for the rights and duties of individuals within a society.

In this line of thought, it is time to mention Hans Kelsen, a prominent Austrian jurist, for whom an effective legal framework can be represented as a hierarchical structure containing all the norms of the legal system. In law, this is known as the *Kelsen Pyramid*. At the top of the pyramid is the Constitution, which is the supreme norm. As one descends the pyramid, there are laws, regulations, decrees, and other sub-legal norms. As one reaches the base of the pyramid, the number of norms increases, but their hierarchy decreases. The Constitution is the fundamental

norm that validates the entire legal system, and any norm that contradicts the Constitution is considered invalid.

Consequently, three levels can be identified in the Kelsen Pyramid: the fundamental level, the legal level, and the sub-legal level. The first level corresponds to the top of the pyramid, where the Constitution of the Bolivarian Republic of Venezuela (CRBV, 1999) is located. The constitution establishes fundamental principles, the structure of the state, the rights and duties of citizens, and the institutions of the country. Additionally, international treaties on human rights acquire constitutional status in Venezuela through Article 23 of the CRBV.

At this level, the Constitution and international treaties take precedence over any other norm. Thus, the Universal Declaration of Human Rights, the American Convention on Human Rights, the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child, the Convention on the Elimination of All Forms of Discrimination against Women, and the Convention against Discrimination in Education are international treaties and agreements that establish and protect various aspects related to education and human rights.

These documents recognize the right to education as a fundamental right and promote equal opportunities in education, the elimination of gender discrimination in teaching, and the encouragement of international cooperation in educational matters. They also emphasize the importance of education in the development of human personality, respect for human rights and fundamental freedoms, as well as the promotion of peace and tolerance in society. They underline the role of parents in choosing their children's education and the importance of education in strengthening the dignity and rights of individuals.

It is important to note that all norms of the Venezuelan legal framework must respect the normative hierarchy and be in accordance with the Constitution. Any norm that violates the Constitution can be declared unconstitutional and, therefore, lack validity. The constitution as the supreme norm serves as the starting point for the elaboration of other laws since it is the fundamental norm that contains the guiding principles and values on which the legal framework of the country is based.

The CRBV (1999), in its Article 7, clearly establishes that *"La Constitución es la norma suprema y el fundamento del ordenamiento jurídico. Todas las personas y los órganos que ejercen el Poder Público están sujetos a esta. La Ley regulará sus características, significados y usos"*[1]. This means that all laws and regulations must be in line with the Constitution, as the latter is the basis on

[1] Our translation: The Constitution is the supreme norm and the foundation of the legal framework. All persons and the organs exercising Public Power are subject to it. The Law will regulate their characteristics, meanings, and uses.

which the entire Venezuelan legal system is built. In relation to education, the constitution grants it the status of a human right (Article 102) and also dictates the role that the State, family, and society must play in the educational process, equality of access conditions to education, gratuity, among others. Furthermore, Article 104 of the constitution mentions the ethical conditions that must be met by those exercising teaching.

Regarding the Legal level, just below the Constitution are the formal laws, including Organic Laws, General Laws, Codes, and Decree-Laws, among others. These laws are enacted by the Legislative Power and must be in accordance with the Constitution. Additionally, international treaties must be approved by the National Assembly to be ratified by the Executive Power. State Constitutions and Municipal Ordinances are also placed at this level and regulate the specific norms of subnational entities.

In this sense, the Organic Law of Education (2009) establishes the legal framework for the Venezuelan educational system, including, among other aspects not detailed here, guiding principles and values, rights, guarantees, and duties in education. The state assumes these as an unwaivable function of paramount interest, as expressed in Article 1 of said regulation. It also addresses issues related to the organization and operation of educational institutions, student evaluation, teacher training, and other crucial aspects of education. Similarly, it describes the scope of application of this law (Article 2), Principles and guiding values of education (Article 3), Education and culture (Article 4), the Teaching State (Article 5), and Educational goals (Article 15).

In a similar vein, the Partial Reform Law of the Organic Law for the Protection of Children and Adolescents, although not exclusively focused on education, guarantees the rights of children and adolescents, including the right to quality education and a safe and healthy school environment. Likewise, the University Law proclaims: "*La Universidad es fundamentalmente una comunidad de intereses espirituales que reúne a profesores y estudiantes en la tarea de buscar la verdad y afianzar los valores trascendentales del hombre*", according to Article 1 of this law.

In this axiological perspective, the Constitution, in Article 2, establishes the higher purposes of the social state of law and justice, promoting superior values in its legal system. But it adds in Article 3 that *"La educación y el trabajo son los procesos fundamentales para alcanzar dichos fines"*. It is worth noting that at this level of the Kelsen Pyramid, Decree 1011 is included, which is a partial modification of the Regulation of the Exercise of the Teaching Profession and contemplates two aspects of singular importance: supervision and the appointment of National Itinerant Supervisors.

[2] Our translation: The University is fundamentally a community of spiritual interests that brings together teachers and students in the task of seeking the truth and strengthening the transcendental values of man.

[3] Our translation: Education and work are the fundamental processes to achieve these purposes.

The Sub-legal Level constitutes the base of the pyramid, where sub-legal norms are found, including regulations, executive decrees, agreements, resolutions, and contracts, among others. These norms are issued to develop or implement laws and must be in accordance with them. However, they cannot contradict norms at the legal level. An example of this is the General Regulation of the Organic Law of Education, which, in Article 1, establishes *"normas y directrices complementarias sobre el sistema, el proceso y los regímenes educativos"*[4].

In this discursive order of the Sub-legal Level, the legal framework establishes mechanisms for the supervision and control of educational institutions, contributing to accountability and transparency in the management of public resources allocated to education. This ensures that resources are used efficiently and for the benefit of the educational community. For this purpose, Resolution 058 states that the organization of the Educational Community occurs through an Educational Council. *"...(omisis)... instancia ejecutiva, de carácter social, democrática, responsable y corresponsable de la gestión de las políticas públicas educativas en articulación inter e intrainstitucional y con otras organizaciones sociales en las instituciones educativas... (omisis)..."*[5].

Similarly, noteworthy at the Sub-legal Level is the Regulation of the Exercise of the Teaching Profession, which contains: *"... (omisis)...las normas y procedimientos que regulan el ejercicio de la Profesión Docente, relativos a ingreso, reingreso, retiro, traslados, promociones, ubicación, ascensos, estabilidad, remuneración, perfeccionamiento, profesionalización, licencias, jubilaciones y pensiones, vacaciones, previsión social, régimen disciplinario y demás aspectos relacionados con la prestación de servicios profesionales docentes"*[6]. (Article 1).

It is worth noting that this regulation is an essential component for the regulation and efficient functioning of the teaching profession in Venezuela because it addresses a wide range of fundamental aspects related to the practice of teaching, demonstrating the importance attributed to education in the country. The fact that the regulation covers areas from entry to retirement and pensions for teaching professionals highlights the intention to provide a solid and comprehensive structure for the teaching profession. Additionally, by including topics such as job stability, remuneration, improvement, and disciplinary regime, it aims to ensure the quality of education and compliance with ethical and professional standards.

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[4] Our translation: complementary norms and guidelines on the system, process, and educational regimes.

[5] Our translation: ...(omission)... an executive instance, of a social, democratic, responsible, and co-responsible nature for the management of educational public policies in inter and intra-institutional articulation and with other social organizations in educational institutions... (omission)...

[6] Our translation: ...(omission)... the norms and procedures that regulate the exercise of the Teaching Profession, related to entry, re-entry, retirement, transfers, promotions, placement, promotions, stability, remuneration, improvement, professionalization, licenses, retirements, and pensions, vacations, social security, disciplinary regime, and other aspects related to the provision of professional teaching services.

In conclusion, after the elements presented and in the interest of pointing out conclusive aspects, it is indicated that the Venezuelan legal framework plays a fundamental role in the protection and promotion of the right to education, in defining standards of quality and equity, in protecting the rights of students, and in accountability in the education system. Its importance lies in establishing the legal framework that ensures education is accessible, inclusive, and of quality for all Venezuelan citizens.

It is also inferred that the Venezuelan legal framework establishes the rights of students, including the right to freedom of thought, expression, and participation in educational activities. It also guarantees the protection of students against violence, harassment, and any form of abuse in the educational environment.

Finally, it is stated that this legal framework is designed to protect and promote the rights of students in Venezuela, including aspects such as equal opportunities, the quality of education, safety in educational institutions, and student participation. In addition to these laws, there are specific regulations that regulate additional aspects of education in the country.

References

Convención Americana sobre Derechos Humanos. *Gaceta Oficial No. 9460 del 11 de febrero de1978*. https://www.oas.org/dil/esp/1969_Convención_Americana_sobre_Derechos_Humanos.pdf

Convención Relativa a la Lucha contra las Discriminaciones. París, 14 de diciembre de 1960. https://culturalrights.net/descargas/drets_culturals422.pdf

Convención sobre la Eliminación de Todas las Formas de Discriminación contra la Mujer. (1979). https://www.ohchr.org/es/instruments-mechanisms/instruments/convention-elimination-all-forms-discrimination-against-women

Convención sobre los Derechos del Niño. (2006), Unicef Comité Español. https://www.un.org/es/events/childrenday/pdf/derechos.pdf

Declaración Universal de los Derechos Humanos. Adoptada y proclamada por la Asamblea General en su resolución 217 A (III), de 10 de diciembre de 1948. https://www.un.org/es/about-us/universal-declaration-of-human-rights

Delgado, P. (s.f). ¿Qué es un ensayo académico? https://virtual.iesip.net/mod/url/view.php?id=10899

El decreto 1011: los supervisores itinerantes. En la perspectiva de los adversarios y defensores. Educere, 4(11), octubre - diciembre, 2000, pp. 227-230l

Ley de Reforma Parcial de la Ley Orgánica de Protección de Niños, Niñas y Adolescentes. Gaceta Oficial Nº 6.185 de fecha 8 de junio de 2015.

Fernández, F. (2023a). Leyes y Reglamentos que Regulan el Sistema Educativo. https://virtual.iesip.net/mod/page/view.php?id=6865

Fernández, F. (2023b). Ordenamiento Jurídico. https://virtual.iesip.net/mod/page/ view.php?id=6864

Pacto Internacional de Derechos Civiles y Políticos. https://www.coe.int/es/web/compass/the-international-covenant-on-civil-and-political-rights

Pacto Internacional de Derechos Económicos, Sociales y Culturales. (1966). https://www.ohchr.org/es/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights

Protocolo Adicional a la Convención Americana sobre Derechos Humanos en Materia de Derechos Económicos, Sociales y Culturales. (1988). https://www.oas.org/juridico/spanish/tratados/a-52.html

Resolución No. DM/58. *Gaceta Oficial de la República Bolivariana de Venezuela No. 40.029, de fecha 16 de octubre de 2012*. http://virtual.urbe.edu/gacetas/39068.pdf

Reglamento del Ejercicio de la Profesión Docente (Decreto N° 1.011 de fecha 4 de octubre de 2000). *Gaceta Oficial N° 5.496 Extraordinario de fecha 31 de octubre de 2000.*

Reglamento General de la Ley Orgánica de Educación. *Gaceta Oficial Nº 36.787 de fecha 15 de septiembre de 1999* Decreto Nº 313.

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Educational praxis from pedagogy and critical didactics

Praxis educativa desde la pedagogía y didáctica crítica

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Abstract

Currently we are facing important debates in various fields of science, it is a matter of social, natural, mathematical and, above all, educational relevance, to strengthen the basic principles of the philosophical and epistemological critical current; In this context, there is great interest in theoretical-practical reflection in the field of educational sciences, especially in the field of pedagogy and didactics. In addition to the basic principles of critical theory and the contributions of the critical tradition in science and education, promoting the development of this pedagogical and didactic direction responding to the needs and interests of our society, which seeks a path towards sociopolitical, economic freedom and cultural, especially in this field.

Keywords Pedagogía critica, didáctica, Educación, corriente crítica. .

Resumen

Actualmente nos enfrentamos a importantes debates en diversos campos de la ciencia, es una cuestión de relevancia social, natural, matemática y sobre todo educativa, fortalecer los principios básicos de la corriente crítica filosófica y epistemológica; en este contexto, existe un gran interés por la reflexión teórico-práctica en el campo de las ciencias de la educación, especialmente en el campo de la pedagogía y la didáctica. Además de los principios básicos de la teoría crítica y los aportes de la tradición crítica en ciencia y educación, fomentando el desarrollo de esta dirección pedagógica y didáctica respondiendo a las necesidades e intereses de nuestra sociedad, que busca un camino hacia la libertad sociopolítica, económica y cultural, especialmente en este campo.

Keywords Pedagogía critica, didáctica, Educación, corriente crítica.

Educational praxis from pedagogy and critical didactics

Today, there is a growing need to reflect and rethink whether the meaning that university professors give to their teaching practices goes hand in hand with vision, innovation and the creation of solutions to problems. educational problems and challenges of our time. Likewise, public educational policies, both international and national, require that university teachers commit to seeking innovative teaching and learning alternatives that allow dynamic and transformative teaching practices, not only from the interdisciplinary nature of science but also from the relevance of its context in the society of influence.

That is why education is a transformative social phenomenon in which the practice of trainers must demonstrate an anthropological position on the content and purpose of the students' learning process, a humanistic and transformative vision of the facts of education. , thus triggering learning-oriented processes to the extent that they are socially relevant, subtly or intentionally infiltrate critical didactic foundations derived from the assumptions of Paulo Freire, Henry Giroux, Peter McLaren, Orlando Fals Borda and others explain it well.

For this reason, this new vision of the educational process must be participatory, intercultural, pro-equal, equitable and inclusive, so educational planning must be flexible, comprehensive, inclusive and intentional, especially in the teaching in process. Therefore, such critical pedagogy must be capable of preparing students to face the cruelty of today's world, based on the construction of knowledge that is carried out individually and collectively, so teachers must become transcultural researchers of the different aspects of diversity. They must gain integration since the Cultural Revolution, to achieve meaning and symbolism in a dialogue full of love and humanity.

In this sense, pedagogy and didactics aim to initiate and accompany all educational activity in the teaching and learning process through political reflection on the teacher-teacher task. Therefore, it is worth mentioning critical theory, which provides us with the basic scientific elements necessary to create an intimate relationship between education and politics in the broadest sense, and politics in its truest sense as well. This is the only possibility of combining individual and collective experience with learning and teaching. It facilitates a fundamental understanding of social interaction and interdependence, which would not be possible without analyzing the political decision-making process within the historical context of each society. This training is only possible because of the relationship between education and politics, especially between pedagogy and critical reflection on society. From the point of view of critical theory, the fundamental objective of education is to clarify, liberate and destroy the domination of the particular and social spheres. I believe that any act of education implies a political position and vice versa. To achieve this, we cannot do without explanatory theories of the relationship between education and political reflection-action, of which perhaps the most coherent is critical theory. For this reason, pedagogy and didactics are considered practical, interactive, social, active, conservative or instructive acts, and therefore, they are political acts.

Critical didactics, also known as critical pedagogy, is a social philosophical movement that uses conceptions of critical theory in the teaching-learning process, offering a series of theoretical aspects that debate both the contents and intentions of pedagogy functioning as ideological support. , the didactics being visible in the classroom and in the contents that are taught directly, being understood in this way as the same process

In this sense, it is understood as a very recent radical theory, which is also referred to as the new sociology of education, in other words, critical pedagogy is a teaching approach that allows the individual to debate and examine knowledge. Who conceive it, thus allowing them to specify a mechanism between theory and practice in which critical cognition is acquired.

For this reason, it becomes a theoretical-practical approach that seeks the development and restructuring of the traditionalist foundations and praxis present in education, in addition to proposing that the teaching-learning process as a tool through which critical consciousness.

Now, from an epistemological point of view, critical didactics assumes that all knowledge is mediated through categories of understanding and its production is contained within the context,

not outside of it (Rojas, 2020). If didactic activity is essentially pedagogical activity, critical didactics takes into account its consequences and political factors.

The latter also claims the idea that the modern school is not a creation beyond history, but is concerned with the emergence and development of specific types of societies and states (Cuesta, Mainer, Mateos, et al, 2005). So it performs an important function that stands out and this includes a focus on the school content and the subjects they teach, the instructional strategies and the relationship between teachers and students, strengthening the dialogic relationships built with an egalitarian dialogue focused on both the needs of the students as well as the needs of the teacher. Likewise, the impact of educational practices on students is examined, particularly those historically excluded from traditional education.

That is why the suggestions developed by the most important representatives of critical education lead to general approaches of traditional pedagogy and strong perceptions. Among the perspectives of these approaches, the student is considered as a producer of information agents who does not need the development of proposals and critical processes, that is, the student is only a beneficiary of the information. As an alternative to theoretical practice, when the hypotheses of critical education are created, Freeire (2005) increases education through practice, of freedom that emphasizes the political and ethical characteristics of educational problems.

Thus, in Freireina's pedagogical proposals, the process of new training must produce a new person who knows his or her own reality and is committed to transforming it, emphasizing reinvention as a fundamental aspect in the construction of dialogue, critical humanism, and liberating experience and the forms of social relationship (Valencia, 2009). Likewise, from the perspective of Giroux (2000), it is a denial and oscillation of new perspectives and critical positions on class systems and processes, how new transgressions can occur that challenge the limits of knowledge and seek a critical approach, so For this author, pedagogy promotes: (a) Creating contexts in which students read and write within and against existing cultural codes. (b) Create spaces that produce new forms of knowledge, subjectivity and identity.

According to the report Teaching Pedagogy: From a Critical Perspective (Ortega Valencia, López & Tamayo, 2013), critical pedagogy, as McLaren sees it, is directly related to practice because it allows us to see various power relations, both internal and external, where a school excels in the fight for the freedom to exist with its own mind, an act of democracy.

Thus, educational practice, according to Giroux (2003), is influenced by subjectivity, by political and cultural interests realized through experience and academic knowledge. Likewise, the acquisition of knowledge is a social rather than an individual activity, since it is one of the results of social interaction, and this knowledge varies according to culture, context and customs.

Now, Freire's problematic pedagogy places dialogue and research as fundamental pillars of the educational process. The characteristics of autonomy, hope, ethics and aesthetics appear as

main elements of the learning process in his work. With his proposals of critical pedagogy, Freire calls for the subjects of the curriculum to form critical and reflective subjects, collectively experiencing change and transformation. It begins with practical experience, moves to theory and returns to modified experience (Mirabal, 2008).

From this point of view, these proposals form a new way of accommodating students and teachers in various sociocultural and political processes of the academy. In the vision of critical pedagogy, teachers must be appreciated based on the ideological and political interests that constitute the environment of the dissertation, socialization in the classroom and the values that they themselves establish in their praxis so that they can adopt different representations and practices, in this way critical pedagogy does not homogenize individuals, but rather shapes the environment of work, socialization in the classroom and the values they affirm in practice, valuing them to embrace diverse expressions and experiences, understand aspects of human fusion and divergence across many differences.

Therefore, it can be seen that the relationship between teachers and students must be based on the knowledge that there is a close dependence between knowledge and power, and tools must be provided to generate transformation in everyday life. Changing what a teacher sees as a "need" is done through education.

This is why the didactics used in classes can create a concept of a life project that aims to achieve a quality of life diametrically opposed to the factor of social isolation to achieve free, quality education. Critical pedagogy should then promote critical learning, but it should involve critical practice by problematizing and examining knowledge based on an appropriate logic of thought.

According to Ramírez (2008), there are six assumptions that must be considered to describe and understand critical teaching. These hypotheses describe both the theoretical foundation of critical didactics and the learning activities emanating from them:

Promotion of Social Engagement: According to the public education model, critical pedagogy promotes social engagement beyond the school context. It involves strengthening democratic thinking to enable collective awareness of issues and alternative solutions.

Horizontal Communication: It aims to ensure equality of conditions among different fields involved in the teaching-learning process. Therefore, the hierarchical relationship is broken, and the process of "unlearning," "learning," and "relearning" is established, which also affects subsequent "thinking" and "evaluation."

Historical Reconstruction: Historical reconstruction is an experience that allows us to understand the emergence of pedagogy and consider the scope and limits of the educational process as a result of political and communicative changes.

Humanization of the Educational Process: It means sharpening the senses while stimulating

intellectual functions. It involves creating the necessary conditions for self-care and the formation of collective behaviors. The same applies to the critical awareness of institutions or structures that cause oppression.

Contextualization of the Learning Process: Based on the principle of nurturing community life, it seeks manifestations of collective identity in the face of cultural crises and values based on separation and exclusion. In this way, schools are perceived as settings that test and question hegemonic models.

Changes in Social Reality: All of the above has implications not only in the classroom but also at the micropolitical level. Schools are perceived as spaces and dynamics where social problems can be addressed, and concrete ways of finding solutions can be proposed.

For this reason, in the educational context, starting from critical pedagogy is a new paradigm of thought. The professional experience of a teacher can be seen as a kind of academic life, and the main meaning of the learning process is who, why, how, when, and where specific activities and academic activities will take place. These learning activities provide a way to develop self-awareness to promote the construction of new knowledge from personal experience, transformation, as well as the specific context of the individual, and social change in a socio-educational context.

A first conclusion derived from the above is that from a critical standpoint, the educator accepts a theory that views society's problems not as an isolated fact of each individual but as the result of an established interaction between the individual and society, as the individual is an agent of this society (they create this context and create). While dialectical theory creates interactions "from context to components and from subsystems to facts," critical theory considers these aspects simultaneously. Critical educators believe that schooling must have a truly theoretical aspect. Critical theorists argue that "knowledge is socially constructed." That is, it arises from a collective agreement among individuals who maintain certain social relationships and ties over a period of time. Critical pedagogy asks how and why knowledge is constructed as it is and how some of these constructions are legitimized and adopted by the dominant culture, granting some forms of knowledge more power and recognition than others.

Similarly, it is concluded that critical educators are concerned with transcending existing contradictions and finding harmony between technical and practical knowledge. Critical pedagogy is fundamentally concerned with understanding the relationship between power and knowledge. The curriculum of critical pedagogy provides an opportunity to prepare students for roles such as mastery or subordination, so they are interested in how the various elements used in the curriculum are implemented in practice. Critical teaching does not guarantee the absence of obstacles. However, it provides a framework for understanding barriers so that all pedagogies are vulnerable to sociocultural conditions that lead to resistance, thus providing opportunities for learners who are considered unique causes of resistance.

In conclusion, it is affirmed that, in the current Latin American context, critical pedagogy plays an important role in overcoming inequality and exclusion, in the vindication and evaluation of educational work, and in preserving ethical and political values in educational practice. Environments where individuals and their processes of reality change thrive.

References

Cuesta, R., Mainer, J., Mateos, J. Merchán, J. and Vicente, M. (2005) Didáctica crítica. Allí donde se encuentran la necesidad y el deseo. *Con-ciencia Social*, 9, 17-54. https://dialnet.unirioja.es/descarga/articulo/2307535.pdf

Freire, P. (2005). *Pedagogía del oprimido*. Siglo XXI.

Giroux, H. (2000). Democracia y el discurso de la diferencia cultural: hacia una política pedagógica de los límites. *Kikirikí: Quaderns digitals*, 31-32. http://www.quadernsdigitals.net/index.php?accionMenu=hemeroteca.VisualizaArticuloIU.visualiza&articulo_id=1055

Giroux, H. (2003). *Pedagogía y política de la esperanza. Teoría, Cultura y enseñanza*. Amorrortu editores.

Piedad, O. V., López, C. D. Tamayo, V. A. (2013). *Pedagogía y didáctica: Desde una perspectiva crítica*. Bogotá.

Ramírez, B. R. (2008). La pedagogía crítica. Una manera ética de generar procesos educativos. *Folios*, 28, 108-119. https://www.redalyc.org/pdf/3459/345941358009.pdf

Rojas, O. A. R. (2009). La didáctica crítica, critica la crítica educación bancaria. *Integra Educativa*, 4(2), 93-108. http://www.scielo.org.bo/scielo.php?script=sci_arttext&pid=S1997-40432009000100006

Ortega, V. P. (2009). La pedagogía crítica: Reflexiones en torno a sus prácticas y desafíos. *Pedagogía y Saberes*, (31), 26-34. https://www.redalyc.org/pdf/6140/614064889003.pdf

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Ongoing teacher training for educatinal inclusion based on competency-based teaching

Formación permanente del docente para una inclusión educativa basado en la enseñanza por competencia

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Abstract

Currently, society is reshaping education and continuous teacher and future professional training, emphasizing inclusion and competency-based methodology. This aims to equip educators to foster inclusive education from various perspectives, driving changes for effective outcomes and adaptation to high-quality methodological strategies. The article aims to establish a relationship of inclusive education with teaching, based on competency-based methodology, highlighting that this implies profound changes at all educational levels and requires a commitment to educational excellence for optimal teacher training and inclusion across all educational contexts. The article amalgamates these concepts in research that seeks to analyze continuous training to build pedagogical knowledge and promote competency-based teaching as essential elements to encourage complex thinking and advance in the educational field.

Keywords: Ongoing training, educational inclusion, competency-based teaching, disability.

Resumen

En la actualidad, la sociedad reconfigura la educación y la formación continua de docentes y futuros profesionales, con énfasis en la inclusión y en la metodología basada en competencias. Esto busca capacitar a los educadores para fomentar una educación inclusiva desde distintas perspectivas, generando cambios para resultados efectivos y adaptación a estrategias metodológicas de alta calidad. El artículo se propone establecer una relación de formación inclusiva con la enseñanza, a partir de la metodología basada en competencias, subrayando que esto implica cambios profundos en todos los niveles educativos y exige compromiso con la excelencia educativa para una formación docente óptima y la inclusión en todos los contextos educativos. El artículo amalgama estos conceptos en una investigación que busca analizar la formación continua para construir conocimiento pedagógico y promover la enseñanza basada en competencias, como elementos esenciales para fomentar un pensamiento complejo y avanzar en el ámbito educativo.

Palabras clave: Formación permanente, inclusión educativa, enseñanza por competencia, discapacidad.

Ongoing teacher training for educational inclusion based on competency-based teaching

The educational process brings with it the need for continuous training of teachers in their various areas of knowledge and competencies. An academic training experience will allow the teacher to move towards comprehensive training for the inclusion of inclusive educational practices, where teaching is strengthened, and where the teacher can also be grounded and transformed in various ways of thinking to achieve the acquisition of knowledge.

Each academic experience brings along a variety of approaches and trends that will allow the teacher to approach each teaching process differently, depending on the condition presented,

and in which from educational practice to research tasks, they can develop to enhance those learning experiences in order to approach a competency-based teaching model. This approach addresses the inclusion of students with disabilities in primary education.

With reference to the above, competency-based teaching and the ongoing training of teachers for the educational inclusion of students aim to develop in teachers a critical and cooperative spirit, framed in its fundamental principle, which is to address the diverse needs of students. This requires applicable skills and knowledge, so that the result of pedagogical knowledge allows them to manage didactic resources, where the student can actively engage in their own learning and reflect on their daily practices.

It is worth noting that when talking about ongoing teacher training for inclusion, we are referring to that personal training process that is acquired for the achievement of pedagogical teaching. This process must respond to a structure of knowledge and skills, so that this complex reality, with a unique experience of innovation and creativity, enables the teacher to develop competency-based training relevant to educational programs and quality management. This includes student mobility, professional training, focus, and excellent application of knowledge to address the difficulties of children, youth, and adults equally and ensure them an education.

In this regard, educational inclusion seeks to encourage and ensure that every person is "part of" and does not remain "separated from." As a result, it contains certain demands, disciplinary characteristics, the pursuit of truth, and respect for differences. In this context, Casanova (2018, p. 1) deduces:

> *El modelo de educación inclusiva supone la implementación sistémica de una organización educativa que disponga de las características y posibilidades necesarias para atender al conjunto de la población escolarizada, diversa por principio y por naturaleza, en estos momentos de la historia. Dicho planteamiento implica la disponibilidad de un currículo abierto y flexible, es decir democrático y una organización escolar que permita su práctica óptima. Además, la educación inclusiva debe constituir un núcleo aglutinador de la sociedad, que colabore con el centro educativo para que este se convierta en una comunidad de aprendizaje, en la que todos participan y aportan, su riqueza individual y grupal a la mejora de cada uno de sus integrantes*[1].

It is necessary to direct an educational model in accordance with the demands of including students with disabilities from a cross-cutting perspective, which equates to a whole system esta-

[1] Our translation: The model of inclusive education implies the systemic implementation of an educational organization that possesses the necessary characteristics and possibilities to cater to the entire enrolled population, diverse in principle and by nature, in these moments of history. This approach involves the availability of an open and flexible curriculum, that is to say, democratic, and a school organization that allows for its optimal practice. Moreover, inclusive education must constitute an aggregating core of society, collaborating with the educational center to transform it into a learning community, in which everyone participates and contributes, their individual and group wealth to the improvement of each of its members.

blished to provide access and reciprocal participation to every person regardless of their condition. Human beings, even though they are characterized by the need to come together or group in all spheres of human life, in some way, experience the phenomenon of exclusion; hence, it is necessary to recognize that education for inclusion is required. In this sense, the teaching of competencies must be integrated into the teacher, empowering them in the process and development of that curricular conception, including didactic conception and the types of strategies to implement, taking into account that prior to this, the teacher must identify capacities and competencies related to inclusive attention.

It means then that we must maintain a focus on teaching with specific aspects towards the teaching of learning, in order to integrate knowledge into each of the cognitive processes. Castillo *et al.* (2022, p. 1) assert that *"La realidad contemporánea demanda un docente que tenga roles activos en la elección de alternativas pedagógicas, que estimulen la capacidad de participar ofreciendo opciones que le permitan a los educandos aprender críticamente"*[2]

As can be understood, it is important to equip the teacher with the basic tools that enable them to assume their own potentialities, allowing them to navigate, consider changes that may be necessary, including those that arise from social processes, with an open stance towards reforms and consistency in their structures and methods. In this regard, education needs teachers with innovative attitudes and dispositions, capable of tackling projects and fostering educational innovation, in order for them to transfer knowledge for the proper use of methodologies, aiming to achieve effective teaching and meaningful inclusion of learning.

Teacher training should be oriented towards investigating their teaching reality, where, as the authors Cejas *et al.* (2019, p. 5) point out, three basic domains for understanding formation are shown: *"el saber (conocimientos), el saber hacer (de las competencias) y las actitudes (compromiso personal)"*[3]. It's worth mentioning that the competency-based approach, as an educational methodology, enables students to acquire content and reflect in the individual a set of skills, abilities, and knowledge, so that the person engaged in an activity can be committed to fulfilling responsibilities and, in turn, demonstrate their performance in the workplace.

Regarding the competency-based approach, it is seen as a contemporary approach, aiming to foster lifelong learning, and it has had behavioral versus constructivist positions. As an approach, it possesses diverse attributes, which are based on the construction and integration of resources such as capabilities, skills, and attitudes.

For Tobón (2013), the competency-based approach aims to change the way of thinking about and approaching educational practice, moving towards an optimal performance of the teacher

[2] Our translation: Contemporary reality demands a teacher who has active roles in choosing pedagogical alternatives that stimulate the capacity to participate by offering options that allow students to learn critically.

[3] Our translation: knowledge (content), know-how (competencies), and attitudes (personal commitment).

in educational processes, which will lead to simplifying learning according to the interests of each participant. Hence the importance of seeking strategies and methods that enable ongoing teacher training for educational inclusion.

Consequently, teacher training from the competency-based approach allows us to move towards the quality of the teaching process, which must chart a course towards effective learning. A clear definition of what educational quality development is brings us closer to those skills and knowledge that aid in the planning, progress, and advancement of teacher training.

Based on the same premise, it is important to make it clear that competencies, understood as a teaching and learning process, are oriented towards people acquiring skills, knowledge, and abilities, and in turn, forming themselves to achieve development through communication, construction, and interaction, allowing the teacher to take on a self-directed and intelligent approach to their own knowledge.

In the words of Flórez & Vivas (2007, p. 169), *"Todo proyecto y acción educativa son válidos y potentes pedagógicamente si contribuyen a la formación humana"*[4]. It can be said that any project or action that has an impact on human formation is valuable and effective from an educational standpoint.

Subsequently, competency-based teacher training focuses on developing practical skills and knowledge in future educators, enabling them to effectively confront real situations in the classroom. This approach aims for teachers to apply what they've learned in everyday situations and to be prepared to adapt to the changing needs of students and the surrounding world. Additionally, competency-based training aims to promote collaborative work and ongoing reflection on teaching practice.

However, continuous teacher professional development is a continuous and essential process for the professional growth of every educator. It consists of a set of activities, courses, workshops, seminars, and other initiatives aimed at improving teachers' skills, knowledge, and competencies in their pedagogical work, as well as curriculum reorganization, and in turn, promoting a genuine change in teachers' perception by modifying ingrained implicit beliefs.

In this sense, Monereo (2010) proposes teacher training based on four (4) dimensions: the first is the level of definition of the training program, the second is the extent to which it is agreed upon with teachers and participants, the third is the meaning and sense given to the training as a socio-cultural learning project, which achieves the personal effort of human beings to be educated in the most appropriate and competent way in order to come together in a space that enables equality, freedom, and fraternity for all.

[4] Our translation: Any educational project and action are valid and pedagogically powerful if they contribute to human formation.

Now, concerning the training of teacher competencies, these are skills and knowledge that a teacher must possess to perform their work effectively, such as knowledge of the content they teach, the ability to plan and organize teaching, the ability to teach when transmitting knowledge, as well as the way they assess student performance through motivating teamwork that fosters collaboration among all to achieve success in the teaching process.

On the other hand, Davini (2015, p. 19) states that:

> *A partir de entonces y hasta hoy, en relación con el papel de las prácticas en la formación de los docentes, se ha venido desarrollando un movimiento que apunta a recuperar la vida real de las aulas, en su diversidad y complejidad y las experiencias concretas que se desarrollan en ellas*[5].

According to the author, the teacher transforms each experience and learning developed in the classrooms by projecting an education-oriented approach to students. Thanks to their continuous training, they can innovate, create, and discover new meaningful strategies corresponding to the interests and needs of the students.

As can be seen, teachers can develop a wide variety of competencies based on their training. Some of the most common competencies that teachers can develop include pedagogical skills, subject matter knowledge, classroom management skills, the ability to foster a positive learning environment, assessment and monitoring skills for both the teacher and students, teamwork skills, and collaboration with other teachers, as well as the ability to adapt to the individual needs of each student.

Similarly, for a teacher to form and provide effective teaching, they must seek a participatory construction of pedagogical models within educational projects. This involves planning, implementing, and evaluating the teaching-learning process, along with didactic competencies that develop knowledge and techniques to transmit content clearly and comprehensibly.

Regarding competence-based teaching, it is an educational approach that focuses on the development of practical skills and knowledge in which students need to face real-life situations, rather than focusing on the transmission of theoretical information. It involves solving problems and making decisions within the learning space for the optimal development of their social and emotional skills.

In this regard, Díaz (2006, p. 98) points out:

[5] Our translation: Since then and until today, in relation to the role of practice in teacher training, a movement has been developing that aims to recover the real life of the classrooms, in its diversity and complexity and the concrete experiences that take place in them

> *El docente tiene que desarrollar su sabiduría experiencial y su creatividad para afrontar las situaciones únicas, ambiguas, inciertas y conflictivas que configuran la vida del aula. En esta situación, es la práctica el elemento vertebrador de la formación docente, de manera que es en ella y a partir de ella como se organizan los programas de formación.*

The teacher must develop experiential wisdom and creativity to face the unique, ambiguous, uncertain, and conflicting situations that shape the life of the classroom. In this situation, practice is the central element of teacher training, so that programs are organized based on it and derived from it.

In light of what the author has presented, the teacher plays a significant role in the education of the student, employing various methods in learning spaces through continuous training. This enables the teacher to create gratifying experiences aimed at enhancing students' cognitive processes when they encounter situations that make them think, feel, and solve any given situation, guided by the curriculum implemented by their teacher.

Hence, the teacher can develop competencies within the learning space in various ways. Firstly, it is important for the teacher to have clarity about the competencies they want to develop and consider them when planning their classes. An effective strategy is the use of active and participatory methodologies, allowing students to develop their skills and competencies through practice and reflection.

For example, problem-solving, guided research, among others, are methodologies that encourage competency development. It is crucial for the teacher to be a role model for their students, demonstrating skills and attitudes associated with the competencies that can be developed, not only through theory but also through practical examples.

Likewise, the teacher can motivate their students to develop competencies in various ways. It is important for the teacher to foster a positive and safe learning environment in which each student feels comfortable participating and taking risks in their learning. This can be achieved effectively through gamification, involving the use of game elements in the educational process. For instance, the teacher can design activities that include challenges and rewards, motivating students to learn and develop their competencies.

On the other hand, Imbernón (2013, p. 493) expresses:

> *La planificación de la formación permanente del profesorado ha de responder a las exigencias del Sistema Educativo. Por lo tanto, será necesario que se planifique una forma-*

[6] Our translation: The teacher has to develop his experiential wisdom and creativity to face the unique, ambiguous, uncertain and conflicting situations that make up the classroom life. In this situation, it is the practice the backbone of teacher training, so that it is in it and from it that training programs are organized.

> *ción permanente que se corresponda, que dé respuesta, a esas exigencias; de la misma manera, dicha formación deberá situarse, de acuerdo a la coyuntura que atraviesa el sistema dentro del sistema educativo que contemple todos los elementos implicados y que les dé sentido*[7].

For the author, every teacher in their process of continuous training appropriates the necessary knowledge to respond to the specific needs expressed by their students through a praxis aimed at developing planning through didactic innovations based on the curricular design that guides the learning model. This will strengthen each student's abilities in the social and pedagogical sphere.

It is worth mentioning the personalization of learning, which allows the teacher to adapt to the individual interests and needs of each student. In this way, students are motivated to learn because they feel that their educational process is relevant and meaningful to them. The teacher must promote self-evaluation and reflection in their students so that they can become aware of their own learning process and set realistic and achievable goals. In this way, students will be more engaged in their own educational process and more motivated to develop their competencies.

The challenges in teacher training are many and varied, but teachers can overcome them with continuous training, a learning attitude, and a willingness to adapt to changes. Therefore, teachers must be able to work as a team with other teachers and school staff members to improve the quality of education, which involves developing effective communication and collaboration skills.

In this regard, Peña (2017) refers to the fact that teaching practice has taken a 180-degree turn at this moment. In this changing world, education is not exempt from this; everything requires changes, constant training, courses, workshops, and innovation in educational planning are incentives for improvement in teaching, in favor of achieving quality in the teaching-learning processes.

So that the teacher's commitment in the teaching process is expected to be guided through the changes reflected in current education, through the development of competencies leading to direct and participative training to take on a role that will strengthen their confidence in structuring a curricular organization. Through experience, depending on the methodology developed creatively, playfully, and practically in the classroom.

It is noteworthy that teachers must stay updated to assess competencies. The teacher needs to have a clear understanding of competencies, design appropriate evaluation tools, observe and record evidence, analyze the results, and provide feedback to students.

[7] Our translation: The planning of continuous teacher training must respond to the demands of the Education System. Therefore, it will be necessary to plan continuous training that corresponds, that responds, to those demands; in the same way, this training should be situated, according to the current situation the system is going through within the educational system that considers all the elements involved and gives them meaning.

While it is true, Gorodokin (2006, p. 2) points out: *"la formación de formadores debe procurar sujetos competentes, contribuyendo a la construcción de la mirada del sujeto enseñante, como concepto fundante en la constitución del oficio de docente como punto de partida de la construcción de la realidad"*[8]. It is important to highlight the significance of teacher training to be able to assume a role oriented towards competency development, allowing the student to demonstrate their skills and abilities through strategies that provide guidance. In this way, they acquire knowledge through content adapted to the interests of each student within the learning space.

On the other hand, educational institutions in the different modalities of the Venezuelan educational system aim to promote teacher training projects based on collaborative practices. This involves the teacher imparting teaching styles and promoting formative models within the educational center, structured through conferences, workshops, formal qualification programs, informal activities, networking, collaboration among center colleagues, and reading academic literature.

Considering the above, it is important for the teacher to have competencies related to teaching and didactic pedagogical strategies aimed at the student's needs in the educational institution, to achieve opportunities where they strengthen their pedagogical practice every day and can guide in preventing the needs of the student, for the achievement of opportunities.

In all of this, Díaz (2013, p. 2) points out:

> *El docente es una circunstancia que se forma desde la interioridad de una persona. Si la persona tiene principios, valores y convicciones así las tendrá el docente y desde esta referencia axiológica, que se inicia y desarrolla en la familia, como valores fundantes, se forma el docente. Quienes ingresan a la docencia, bien por vocación primaria, tradición familiar u otras razones, configuran con sus valores, conocimientos, tradiciones y prácticas su identidad profesional. Cada docente constituye una historia por reconstruir y una biografía por escribir. Esa es la memoria pedagógica. Memoria que permite la reunirse con las esperanzas, sueños, dedicación, entrega y esfuerzos que se dibujan en rostrocidad del docente*[9].

[8] Our translation: teacher training must aim for competent individuals, contributing to the construction of the teacher's perspective, as a foundational concept in the constitution of the teaching profession as a starting point for the construction of reality.

[9] Our translation: The teacher is a circumstance that is formed from within a person. If the person has principles, values, and convictions, so will the teacher, and from this axiological reference that begins and develops within the family, as fundational values, the teacher is shaped. Those who enter teaching, whether through primary vocation, family tradition, or other reasons, configure their professional identity with their values, knowledge, traditions, and practices. Each teacher constitutes a history to be reconstructed and a biography to be written. That is pedagogical memory. A memory that allows one to come together with the hopes, dreams, dedication, commitment, and efforts that are depicted in the teacher's visage.

The implementation of the epistemological approach will generate knowledge that will strengthen educational practice, allowing the teacher to recognize the importance it has in knowledge, as a thinking and feeling being, a reference that promotes the acquisition of knowledge through reflection and criticism, to be open to achieving meaningful learning through flexible tools based on the pedagogy employed by the teacher within the educational process.

In the teacher's work in learning environments, it is relevant for them to execute transformations and changes in educational matters. This reflects the subjectivity of their functions, thanks to the strategies or actions established for the well-being of their students. Their interest lies in wanting to learn and develop to provide comprehensive tools in the classroom, avoiding barriers that may interfere with teacher-student communication, as each child learns what their teacher has taught them.

It should be noted that the teacher is constantly in continuous training. To have proper performance in the classroom, they must have a commitment and responsibility to their students, expressing affection in teaching, and thus observing academic progress in students. Their role as a guide can be objective in reflecting on their experience as a teacher in the space that provides education.

It means then that teacher training aims to learn a series of skills and abilities to be developed in teaching, when it is of interest to a group of students with disabilities during the inclusive education process. This encourages them to acquire learning from both a personal and professional perspective with the group of students under their care.

In this regard, Díaz (2006, p. 14) expresses:

> *La discusión que se adelanta sobre la formación docente exige un cambio radical respecto a las concepciones y prácticas que se desarrollan, a pesar de las fuerzas de cambio que emergen en los movimientos pedagógicos, permiten asumir la reflexión epistemológica como una opción que le permita al docente transformar la concepción, muchas veces estática, de su mundo personal y de la realidad, mediante un profundo proceso reflexivo para así elaborar nuevos conocimientos que coadyuven a fortalecer y desarrollar su práctica pedagógica, la cual revela, en gran parte, su proceso formativo*[10].

For this purpose, research is conducted to discover a competency model that fits the current characteristics of students through projects applied in classrooms. Thanks to their training, they become capable of enhancing their skills by explaining different tasks to fulfill the curriculum guidelines for teaching.

[10] Our translation: The discussion on teacher training demands a radical change regarding the conceptions and practices that are developed, despite the forces of change emerging in pedagogical movements. This allows assuming epistemological reflection as an option that enables the teacher to transform the often static conception of their personal world and reality. This is achieved through a profound reflective process to elaborate new knowledge that contributes to strengthening and developing their pedagogical practice, which largely reveals their formative process.

According to Davini (2015), teaching practices encompass a wide range of specific skills related to the central axes of professional action, regardless of the specific school context in which the teacher works. Training in these skills develops throughout teaching experience; however, many of them need to be guided from initial training. They relate to the organization of teaching proposals and their methodological construction, decision-making in action, management of spaces, times, student groups, teaching and information resources, and evaluation processes. These skills represent content to be developed in practical knowledge.

Therefore, the teacher in their process of continuous training is constantly learning to provide suitable educational practices for the student population. Their methodological strategies will facilitate decision-making when carrying out a series of activities in time and space, thus fulfilling content development. They can contextualize the information provided by the teacher through different resources that will strengthen their abilities to evaluate the practical knowledge acquired by the student within the classroom.

It i necessary to emphasize what Imbernón (2011, p. 82) states:

> *Una formación como desarrollo profesional debe proponer un proceso de formación que capacite al profesorado en conocimientos, destrezas y actitudes para desarrollar profesionales reflexivos o investigadores; en ellos, se considera como eje clave del currículum de formación del profesorado el desarrollo de instrumentos intelectuales para facilitar las capacidades reflexivas sobre la propia práctica docente, y cuya meta principal es aprender a interpretar, comprender y reflexionar sobre la enseñanza y la realidad social de forma comunitaria. Adquiere relevancia también el carácter ético de la actividad educativa*[11].

Every teaching professional provides attention to students through curricular adjustments, which will allow planning, diagnosing, and analyzing the learning outcomes achieved from the various instructional tasks assigned by their teacher. This will result in internal and external training to be implemented in problem-solving according to the social and educational context that offers a quality life in the environment they have been included.

Maintaining an inclusive education relationship with a competency-based approach implies profound changes at all educational levels, taking into account and clarifying that following this approach is committing to quality teaching to achieve teacher training, seeking inclusion in all educational contexts.

[11] Our translation: A professional development training should propose a training process that empowers teachers with knowledge, skills, and attitudes to develop reflective or research-oriented professionals. The key axis of the teacher training curriculum is considered to be the development of intellectual tools to facilitate reflective capacities regarding their own teaching practice. The main goal is to learn how to interpret, understand, and reflect on teaching and social reality in a communal manner. The ethical nature of educational activity also becomes relevant.

In conclusion, the competency-based approach, seen from competency-based training, will allow the teacher to transform in their different ways of thinking and understanding and guiding in educational practice for meaningful training. A teacher who teaches with parameters will make their student begin to value the human, and the construction of autonomous learning will serve as personal growth for curricular training guidance. In turn, this will allow the development of competencies in a significant way to move towards teacher training with a focus on educational inclusion, accessing organization to obtain multifaceted learning, suitable for the complexity of society and its emergencies.

Consequently, the teacher must have as a basis continuous training for complex thinking that allows assuming a self-reflective strategic training with a great interest in inclusion and in the field of education. Additionally, it is crucial to consider a perspective focused on curriculum design, based on action research, with the purpose of understanding all metacognitive processes from a competency-based approach.

Indeed, improving the quality of teachers at different levels of subsystems implies the need to conceptualize competencies within the framework of human development. This is achieved by establishing complex thinking as a fundamental basis for its development and application.

Finally, the teacher must be clear that every formative process undergoes continuous change that occurs within each formative process and allows organizing and integrating all cognitive aspects to understand the dynamics in which education functions as an integrated system, which allows forming, including, and developing complex thinking that complements building inclusive education.

t is worth noting that within the rationality of the human being, several elements intertwine, allowing, as Morin expresses, an understanding of complex thinking. This is related to human life and social relationships; assuming a change and thinking about that reality that resists inclusion and training, arguing ideas that allow rationality and recognition of subjectivity and affectivity that involves inclusion.

References

Casanova, M. A. (2018). Educación inclusiva por que y para qué. *Revista Portuguesa de Educação*, 31, 42-54. https://www.redalyc.org/journal/374/37458867001/html/

Castillo, C. G. E., Sailema, M. J. E., Chalacón, M. J. B., and Calva, A. A. (2022). El rol del docente como guia y mediador del proceso de enseñanza. *Ciencia Latina Revista Cientifica Mutidisciplinar*, 12. https://ciencialatina.org/index.php/cienciala/article/view/ 4409/6764

Cejas, M. F., Rueda, M. M. J., Cayo, L. L. E., and Villa Andrade, L. C. (2019). Formación por competencias: Reto a la educación superior. *Revista Ciencias Sociales*, XXV(1). https://www.redalyc.org/journal/280/28059678009/28059678009.pdf

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Davini, M. C. (2015). *La formación práctica docente*. Editorial Paidos .

Díaz, Q. V. (2006). Formación docente, práctica pedagógica y saber pedagógico. *Laurus*, 12, núm. Ext, 88-103. https://www.redalyc.org/articulo.oa?id=76109906

Díaz, Q. V. (2013). *La reflexión epistemológica en la práctica pedagógica como entidad de la formación docente*. En D. Izarra y R. Ramírez (Comps.), Docente, enseñanza y escuela. (pp. 21-37). Caracas: Universidad Pedagógica Experimental Libertador. http://ciegc.org.ve/wp-content/uploads/2022/12/1-La-reflexion-epistemologica-en-la-practica-pedagogica.pdf

Flórez, O. R., and Vivas, G. M. (2007). La formación como principio y fin de la acción pedagogica. *Revista Educación y Pedagogia*, XIX(47), 165-173. https://bibliotecadigital.udea.edu.co/bitstream/10495/7041/1/OchoaRafael_2007_formacioncomoaccionpedagogica.pdf

Gorodokin, I. C. (. (2006). La formación docente y su relación con la epistemologia. *Revista Iberoamericana de Educación*, 1-9. https://rieoei.org/historico/deloslectores/1164Gorodokin.pdf

Imbernón, M. F. (2011). Un nuevo desarrollo profesional del profesorado para una nueva educación. *Revista de Ciencias Humanas*, 12 (19), 75-86. http://revistas.fw.uri.br/index.php/revistadech/article/view/343

Monereo, C. (2010). La formación del profesorado: una pauta para el análisis e intervención a través de incidentes críticos. *Revista Iberoamericana de Educación*. 52, 149-178. https://rieoei.org/historico/documentos/rie52a08.pdf

Morin, E. (1998). *Introducción al pensamiento complejo*. Gedisa Editorial.

Tobón, S. (2013). *Formación integral y competencias. Pensamiento complejo, currículo, didáctica y evaluación*. (4ta. Ed.). ECOE.

Music, philosophy, and transcomplexity: a conjunction between man, melody, thought and reality

Música, filosofía y transcomplejidad: una conjunción entre hombre, melodía, pensamiento y realidad

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Abstract

This document aims to demonstrate the relationship between music and thought, two forms of art and expression, which are oriented towards developing a balance between science, art, logic and emotion, which demonstrate the need of man in hold an integral and transcendental vision of its context, in an attempt to conceive a profuse and integrating perception of reality. With the emergence of transcomplexity, man is faced with the possibility of building an open, reflective and integrating vision of his environment, with the intention of giving new meaning to his perception of reality from a flexible and unfinished position. However, in the philosophical study of music, this has shown us from its beginnings some aspects that transcomplexity has provided to man in contemporary times. So, will music be a precedent for the transcomplex codex? Does its philosophical nature allow us to glimpse a complex and integrating relationship between man and his environment? Is music the beginning of the gestalt awakening? For this reason, the author uses a journey between music and philosophy, seeking to overcome classical borders in its appreciation and study, demonstrating its importance in the field of transcomplexity in his attempt to build new representations to see life and resignify reality.

Keywords: Músic, philosophy, transcomplexity.

Resumen

El presente documento, pretende evidenciar la relación entre la música y el pensamiento, dos formas de arte y expresión, que se orientan en desarrollar un equilibro, entre la ciencia, el arte, la lógica y la emoción, que demuestran la necesidad del hombre en sostener una visión integral y trascendental sobre su contexto, en un intento de concebir una percepción profusa e integradora de la realidad. Con el surgimiento de la transcomplejidad, el hombre se encuentra ante una posibilidad de construir una visión abierta, reflexiva e integradora de su entorno, con la intención de resignificar su percepción de la realidad desde una postura flexible e inacabada. No obstante, en el estudio filosófico de la música, esta nos ha demostrado desde sus inicios algunos aspectos que la transcomplejidad ha proporcionado al hombre en la contemporaneidad. Por lo que ¿será la música un precedente del códex transcomplejo? ¿Su naturaleza filosófica permite vislumbrar una relación compleja e integradora del hombre y su entorno? ¿la música es el principio del despertar gestáltico? Por ello, el autor se vale de un recorrido entre música y filosofía, buscando superar las fronteras clásicas en su apreciación y estudio, demostrando su importancia en el plano de la transcomplejidad en su intento de construir nuevas representaciones para ver la vida y resignificar la realidad.

Palabras clave: Música, filosofía, transcomplejidad.

Thought and Melody: two sides of the same coin

From the beginning of humanity, music has been a primal expression of individual creativity and curiosity. From prehistory, where the nomadic man viewed hunting and gathering as means of survival, to the modern day where man constructs routes or ladders to connect with the stars in more than one sense, music has always been a part. In this way, it's an expression that, despite man's limitations, fallibilities, and flaws, stands as a notable example of his greatness.

Music is, like thought, an expression in constant evolution, a result of its unfinished and adaptive nature, a product of a perpetual back and forth. It aims to express feelings, emotions, situations, and other events of reality. Life itself represents a journey wrapped in multiple melodies and ways of thinking, both of which are harmonic forms endowed with their own sense of beauty and truth. They stem from birth and lead to uncertain paths, shrouded in an aura of mystery and spirituality.

Seen in this light, man on his journey encounters various melodies and ways of thinking. Each one is subject to different ways of conceiving, interpreting, and constructing reality. His philosophical nature prevents him from adhering to one specific form; on the contrary, it points towards multiversality, a construct that follows a narrative thread among different realities, driven by the diversity of ways of thinking, feeling, and seeing. Just like philosophy, music doesn't stray from this reality. It focuses on shaping and transforming the human being at various stages of life, with both resulting in ways to erect beauty, truth, and uniqueness, all under the concept of harmony. The first musical interpretations were inspired by mimesis, a stance that captured sounds and sought to recreate them, resulting in a representation of the natural world through man's musical capabilities.

It is in this way that the natural world has represented for man an ontological foundation for understanding certain events and offering explanations. From this, Pythagoras views music as a science of proportion, which through 4 whole numbers or textures provides a purely mathematical, rational nature, forming musical Pythagoreanism. This is described by Nicola (2008) as a hermetic doctrine that bases the concept of harmony and its presence in nature in a mathematical way and prevents any contrary position. This harmony allows for other applications, as Aguilar (2017) points out, for catharsis and the attention to the 4 humors, aspects that strengthen its specular feature.

However, despite this instrumental and/or specular appearance, a portion of reality is evidenced where music doesn't fully obey a mathematical foundation. While it's true that it has a rational character, it also has a sensitive and even cultural nature, a fact that foresaw new ways of visualizing and interpreting it. Beyond music, from the natural world, man has conceptualized a set of sciences called natural or exact which, based on the explanation or Erklaren, formulate a cause-effect relationship, a formal logic that, through objectivity, determinism, and verification, sets rigorous mechanisms to study reality. However, this proves inefficient to study realities that require concepts based on interrelations, integrations that maintain relationships alternate to

the linear, in response to society.

From a musical standpoint, this insufficiency was observed, since mimesis should not only focus on recreating the natural world under the domination of the mathematical scheme. The concept of harmony involves a dialogic state between different contexts, realities, perceptions, a fact that suggests alternatives to the recreation of nature, involving the manifestation of socio-cultural development that was taking place in different contexts, generating emergent constructs against these representations.

This new sensitivity stimulates new creations, where the melody not only seeks to explain the natural world but also to represent and even criticize fabrics with greater articulation and interaction between parts, such as society, culture, and even the inner being, strengthening the study of that fifth essence. The study of this fifth essence, seen from the inner being and music, implies understanding that the human being is a vibrating being; that is, it resonates in certain situations, ideas, and feelings. For this, the presence of an inner tone, a sound, a melodic expression that man externalizes in his daily life throughout his life is suggested, in the same way that man maintains a way of thinking and even a philosophy of his own. From this perspective, music has foreseen certain epistemic transformations that, within the framework of science and philosophy, have become present, such as the development of logic.

The classical logic is based on restrictive positivist precepts, to the point of being dogmatic, like the early Pythagorean impressions of the art of sound or music. The linear deductive logic inherits the principles of identity, non-contradiction, the excluded middle, and even some Euclidean postulates. Its nature is described by Martinez (2015) as one that guides the mind to make it see, demonstrating that a given theorem or proposition is implicit in axioms, postulates, or fundamental principles, accepting as a basis those that are self-evident and do not require proof.

On the other hand, the same author refers to linear inductive logic as the one with an opposite approach, which generalizes from specific observations to a general conclusion, also seen as universal. This logical scheme notably prevailed in the study of reality. However, just like its musical counterpart, there was a noticeable deficiency due to its partially unreal nature, especially in situations associated with society and its structures. Where linear, neither unidirectional nor causal logic, are enough to understand it, as numerous characteristics intervene, providing a dynamism that positivism did not foresee.

In this regard, authors like Merleau-Ponty (1976) emphasize that the study of these structures cannot be determined from the outside, as they do not come from the physical; they are based on a network of relationships and integrations that, rather than being known, are lived and need to be understood. This is where "verstehen" arises. From this perspective, reality is studied based on what emerges, a stance that involves a dialogical or dialectical logic, where all parts are seen from the whole and vice versa. Authors like Dilthey (1976) emphasize the importance of an interpretative process that recognizes the parts in a repetitive cycle, also known as hermeneutic.

In this line of thought, human nature adheres to a hermeneutic logic, where the meaning of various situations is sought through a dialectical interaction or movement of thought, involving emerging onto-epistemic relations. Music follows this nature, and through harmony, seeks to maintain a relationship between sounds, rhythms, melodies, psyche, mind, among others, as a whole, made possible through dialogical thought.

Harmony, from music, or hermeneutics from philosophy, represent two sides of the same coin. They are based on man's need to maintain an integrative and reflective logic with the possibility of building new meanings, starting from a fruitful dialogue endowed with deep reflexivity, complementarity, and recursiveness. Both stances, today, hold a relativism that approaches the past, evidencing a neo-renaissance of Greek thought and other ways of thinking, all focused on inciting a state of consciousness, a gestalt awakening that allows man to build new interpretations of reality and resignify existing ones.

Transcomplexity: an orchestra between melody and thought

So far, music has been used by man to recreate the natural world, interpret the socio-cultural fabric, and even criticize humanity's path. However, due to its harmonic nature, music focuses on the search for the whole, reconnecting with principles, foundations, disciplines, and other representations through wonder, curiosity, and in the process weaving a path superior to conventional logics that generates more questions and answers, driven by the uncertain and multiple nature of reality.

This search for the whole is also observed in human development and its debate between explanation, understanding, and criticism; it is not about parceling out reality or focusing solely on the internal relationships of a context, but emphasizing transcendence. In other words, it encourages an approach that must overcome and lean towards transdisciplinarity, where different disciplines relate, blurring paradigmatic barriers, and inciting a state of consciousness, that is, a transcendental awakening to the sum of their parts.

In this line of thought, transcomplexity emerges, a state of consciousness that allows the individual to see relationships between different disciplines and guide explanations, understandings, and criticisms, all immersed in reality, providing an integral vision of man and his environment. What is described focuses on overcoming, according to Martínez (2017), naive realism, breaking away from reductionist suffocation, and entering a systematic, integral, and ecological logic, that is, into a universal and integrative consciousness that advocates new ways of building science. But how is transcomplexity visualized from music?

Transcomplexity in music highlights different ways of writing, describing, interpreting, and teaching music, understanding that there is not just one perception or genre. There are different traditions with divergent composition and interpretation characteristics, which, through dialogic interaction, can result in new musical manifestations alternative to the canon, without limiting themselves to the rational, cultural, emotional, or spiritual.

Similarly, transcomplexity, by strengthening connections with the past under soft relativism, seeks a renewal of classical thought as if it were a neo-Renaissance movement, expanding the perception of certain concepts and interrelation in the social fabric, blurring disciplinary barriers. An example comes from the medical applications developed by Sacks (2009), where music is implemented in medical and psychiatric approaches as a brain stimulus factor, and how, from neuroscience, beneficial effects on neuroplasticity are observed, involving new synergies in man without distinction between science and art. This seemingly novel perception is a reconnection with the Greek tradition, where philosophers like Plato recognized it as a relief for the soul, a form of catharsis, and even a means of addressing certain behaviors and diseases linked to the body.

The above highlights various dialogic relationships between science and the arts, drawing from different disciplinary fabrics to the point of resulting in a transcomplex expression. Transcomplexity, in conjunction with music and philosophy, should guide paths in man through traces of wonder, a journey where the conscious search for knowledge extends through numerous principles, foundations, thoughts, paradigms, immersed in multiple worldviews in constant construction and deconstruction. This not only involves a journey through external reality but also recognizes the internal reality, characterized as that vibration or personal philosophy, that recursive, unfinished, and reflective worldview that, like reality, remains in constant evolution, making transcomplexity a bridge between both facets of reality.

In this sense, music and philosophy are ways to understand, delve into, and interpret the relationship between man and reality, all under the transcomplex halo, generating that conscious and gestalt state that brings to light the inner self and exposes hidden nuances immersed in the spectrum of uncertainty. This state of consciousness is an opportunity to detach from established methods and involve new ways to dive into uncertainty. In music, it's about turning creativity beyond logic or feeling, it's about maintaining consciousness, detaching from existing methods, and as Aguilar (2017) indicates, it's about developing an idea, and in the process building a structure around it that obeys a dialectical relationship between man, his facets, and multiple realities, distancing itself from existing tradition.

In research terms, philosophy has allowed us to argue that science does not take refuge in the methodological comfort that, under formulas, limits the generation of new ideas and even predicts creative practices before they have begun. The logic it upholds is based on the development of thought through freedom, dialogic exploration, complementarity, and continuous reflection, to the point of conceiving fruitful dialogue that does not ignore the existing, but tries to represent something new from unknown routes.

Both perceptions demonstrate the transcomplex substrate based on reflection, synergistic relationships, complementarity, continuous dialectical logic, and the recognition of a changing, unfinished, and uncertain reality with more questions than answers, recognizing the interest in curiosity and wonder that gives way to new possibilities, something that harmony from philosophy and music have previously experienced. In this way, it is evident that, like science and re-

search, there are other experiences like music and philosophy that invite man to constantly mutate, adapt, in other words, to remain in motion between melody and thought.

A reflective melody, a closing thought

Philosophy and music each represent, from their own perspectives, humanity's need to evolve and incite a state of consciousness that allows the establishment of continuous, synergistic, complementary, and recursive relationships under the halo of a dialogic and integrative logic with reality. Such facts allow for the establishment of a state of consciousness, termed "transcomplex" that enables the connection, resizing, and redefining of multiple concepts, theories, and positions, resulting in new ways to view and reinterpret reality in its constant construction and deconstruction. This latter aspect is motivated by its changing and unfinished nature.

Studying music involves journeying through sciences, other arts, and philosophy, not only with the intention to enrich the narrative and its compositions but to remain alert to environmental changes. Meanwhile, philosophy is an invitation to wonder, curiosity, questioning, and continuous learning under a love for knowledge. In this way, the art of sound and thought share the common pursuit and construction of emotional perfection, understanding reality, and guiding oneself through traces of wonder and harmony present in an uncertain reality.

The aforementioned allows for reflection on how other human experiences, unconsciously, have evolved and have focused on routes based on transcomplexity. This fact consolidates the need for new relationships between sciences and arts that adhere to reality in an attempt to deepen their fleeting understanding of it. Transcomplexity should promote and maintain this ethical and ecological consciousness that exposes the relationship between the individual and their reality, both immersed in the spectrum of uncertainty.

It's in this context that humans can capture beauty in various expressions and conceive new paths for knowledge seeking. As musicians, philosophers, researchers, and human beings, they connect the internal cosmos with the external, mediating between the macro and micro vibrational cosmos through this harmonic, ethical, and aesthetic relationship.

These relationships are contrary to dogmatism, hermetic thought, and unidisciplinary development. The aim is to establish a transcomplex relationship, given that music isn't governed by a linear, inductive, or deductive logic. It can convey and create, in an instant for the individual, a constellation of concepts, going beyond them to involve feelings and situations, demonstrating its ability to resonate with various human experiences.

Music and philosophy are the precedents that transcomplexity leverages to invite humans to ethically navigate between science and art, through harmony seen as a dialogic conciliatory expression between seemingly antagonistic positions, reconciling reality's vibration with the individual's internal resonance. Hence, new generations should encompass musicians, philosophers, artists, scientists, men of faith and science, in other words, all facets that provide greater

discernment and reflection on reality, as life is melody and conveys thoughts and ideas, and true philosophy is an orchestra born from being. Transcomplexity is the consciousness that orchestrates and links all our thoughts and realities through the harmonization of learning and wonder.

References

Aguilar, A. (2017). *Filosofía y Música. Universidad Panamericana*. https://www.youtube.com/watch?v=zYXWmqwILY8

Dilthey, Q. (1976). *The Rise of hermeneutics,* in P. Connerton (Dir), Critical sociology, Penguin.

Martínez, M. (2015). *Epistemología y metodología en las ciencias sociales*. Editorial Trillas.

Merleau, P. M. (1976). *Fenomenología de la percepción*. Editorial Península.

Nicola, U. (2008). *Atlas Universal de Filosofía. Manual Didáctico de autores, textos, escuelas y conceptos filosóficos*. Editorial Océano.

Sacks, O. (2009) *Musicofilia: relatos de la música y el cerebro*. Editorial Knopf.

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