

MULTIDISCIPLINARITY AS A STRATEGY IN THE FACE OF THE PANDEMIC. FROM SCHOOL EXAM TO REALITY TEST

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ABSTRACT

Introduction. The health crisis (Covid19) has been a global challenge in the field of health, its impact on anthropogenic activities is undeniable, it is important to note that the pandemic could only be contained through multidisciplinary work. Multidisciplinarity and the mastery of knowledge (Morín E., 1999; Delors, 2013), form a robust framework to address complex problems. It is necessary to review the available information, in order to identify where we failed, what we got right, and what adjustments and innovations are necessary. The objective of this research is to search for evidence that supports the usefulness of multidisciplinarity and knowledge in the solution of complex problems. Methodology: The Google Scholar search engine was used, selecting complete texts, free of charge, from the period 2022 to 2024, with the keywords: multidisciplinarity, educational knowledge, knowing how to be, knowing how to learn, knowing how to do, knowing how to live with others, pandemic, confinement, medicine, and Covid 19. The documents that were obtained were analyzed, identifying evidence of multidisciplinarity. Duplicate papers, or without free access or that did not deal directly with multidisciplinarity, were discarded. Results: The search yielded 41 results, we selected those that consistently showed evidence of Multidisciplinarity, finding 21 enriching experiences even in very complex scenarios, highlighting that skills and abilities are required, as a whole they represent Knowledge and these are essential to advance towards multidisciplinary collaboration. Conclusions: Since the last century, the teaching of knowledge for the global world has been promoted and educational centers have promoted it, the examination of such learning was not in writing, the exam was the reality, the lesson shows us that only with multidisciplinary collaboration was it possible to contain the pandemic.

Keywords: Multidisciplinarity. Knowledge. Complexity. Pandemic.

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INTRODUCTION

When the pandemic began in China, it was believed that guarantine would be sufficient, but the progression of the disease only left the way to confinement, (Sánchez-Villena, A. R., and De La Fuente-Figuerola, V., 2020), in addition to the perception that the implementation of social distancing measures, work from home, use of face masks, etc., it would be enough to underestimate the real risk, (Mencheta, C., 2020). For the inhabitants of the other continents there seemed to be a certain distance, before facing Covid in their own territory; The accounting of deaths, disability subsequent to the disease, financial losses, and the many social expressions of the pandemic force us to reflect on how prepared we are for global challenges. Although the work of Edgar Morin (1999) and Jacques Delors (2013) was widely disseminated in terms of the knowledge required for the third millennium, we must self-evaluate, we do not present the written exam, but an examination of "reality" where we must collect evidence and account for the human and financial losses of each region, analyze the hard data and ask ourselves what are we going to do? How did it go? What can we improve? The search for culprits as would be done in dark ages does not take us anywhere, correction and innovation in the different environments is the answer. We can start by learning about the experiences lived during the pandemic and identifying the strategies that gave the best results. The **objective** of this research is to search for evidence that supports the usefulness of multidisciplinarity and knowledge in the solution of complex problems.

METHODOLOGY

We searched for publications in Spanish, in full text, free of charge, from the period 2022 to 2024 with the Google Scholar search engine, combining the following keywords: multidisciplinarity, educational knowledge, knowing how to be, knowing how to learn, knowing how to do, knowing how to live with others, pandemic, confinement, medicine, and Covid 19. Duplicate papers, or without free access or that did not deal directly with multidisciplinarity, or multidisciplinary collaboration during the pandemic, were discarded. We thank the Medical Intern Erasmo Maldonado Sánchez and the Technician Rosa María del Carmen Gómez Guerra, for their support in the capture and selection of the preliminary abstracts.

RESULTS

The search yielded 41 results, we selected those that had collaborative actions at various levels, being 21 publications, since knowledge is acquired formally in school and



informally during socialization in other environments, we also recovered the works that made multidisciplinarity explicit, in *Table 1. Type of document and summary of the content* the results are displayed. Graph *1. Concerns and proposals during and after the pandemic,* corresponding to the period 2022-2024, shows the range of social expression during the health crisis, generated from the documents consulted.

ANALYSIS

Graph 1. Concerns and proposals during and after the pandemic shows us the range of social expression after the health crisis, highlighting the voice of social change, followed by social bonding, the next associated content is the analysis of scientific plans, training from educational centers, touching on the issue of reading as an indispensable skill, that is, the importance of reading competence and the obligatory change migrating from memorization to comprehension, reflection and application of what was learned in the classroom to solving real problems.

Table 1. Type of document and summary of content

Book. The authors propose PBL as a way to optimize learning and put it into practice, addressing real problems and making effective the transfer of knowledge from the classroom to another scenario to apply it, (Baltazar, M. P. D., et al., 2023).

Book. This work describes the historical events that led to the state of perpetual crisis and that the pandemic was only part of the continuity of a path in which the financial sector had the baton and direction over social interests, (De Guzmán, M. G. C. N., et al., (2023).

Book. The Mexican Network of Bioethics Education (REDMEB), share their experience and knowledge of the field of bioethics education and its application, different states of Mexico participate, the use of the lexicon is promoted and easy to understand for the public. (Alanís, M.M.R., et al., 2021).

Thesis. It addresses the complex problem of reading, with competence being comprehensive reading essential to acquire any type of knowledge and the sociocultural factors that prevent the acquisition of a taste for reading, which directly impacts the development of individuals, (Anido, J. C. R., 2022).

Master's Thesis Understands the learning experiences of nursing interns, within the framework of complexity, during their professional training at a Peruvian public university. Following the postulates of the complex thought of Edgar Morín and Paulo Freire. (Arias, G. F. G., 2023).

Book Chapter. With the arrival of Covid, there were changes, borders were closed, and the prices of computer equipment increased by almost 100%, it is proposed to develop our own factories from design, manufacture and production, distribution and sale, (Ávila, M. G., Esquivel, V. V., & Esquivel, P. V., 2022).

Academic Congress. During the Academic Interaction Day, interaction between members of the university community was promoted through the socialization of students' academic experiences, exposing progress and results of work carried out by students from 5th to 9th semester, to present it to the Community, (Bahamon Muñetón, M., et al., 2020).

Book. It is a work aimed at the need to create new teaching strategies, here they focus on Project-Based Learning (PBL), the use of technology in times of COVID-19 is emphasized, the initiatives are urgent, (Baltazar, M. P. D., et al., 2023).

Doctoral Thesis. This dissertation deals with reading comprehension, the purpose of reading, presents a demand for strategies that allow the reader not only to interpret and infer the content of a text, but also to criticize, compare and apply what is read to the social context to transform it in a creative way, (Casamayor Rubio, D. N., 2022).

Book. The work addresses the ravages of Covid19 on mental health (De-Santis, A., et al., 2021).



Book. It is a work that includes interdisciplinarity, interculturality, innovation and the sustainable development of teaching and educational research, its objectives are to promote critical thinking, (Fernández Mora, V.D., et al., 2023).

Communication between members of Latin American social movements evidenced problems that worsened during the pandemic: poverty, violence, environmental exploitation, unemployment, etc., (Guevara Hernández, VA, & Ramírez Torres, V., 2022).

Book. It presents the work carried out at the university and its social linkage, (Huaca, C. G. P., & Riofrío, M. B. E., 2022).

Book. This work discusses the social complexity and how the quality of life of the population has deteriorated in the face of a set of events that relapse as a result of policies unrelated to social needs, (Leonor, V. P., Elena, L. R. L., & Escobosa, A. P., 2023).

Website. Community actions are narrated through a collaborative network in various regions of Ibero-America, (Martelotte, L., Mascheroni, P., & Rulli, M., 2023).

Book. Despite the information that was received months before the arrival of Covid, when the measures arrived they were overcome, modifying the perception of reality, states such as anguish, anxiety and despair were very frequent, (Mencheta, C., 2020).

Book, A review of the experience of the pandemic, a critical orientation of scientific programs and their relationship with social problems is perceived (Mendoza Arenas, R. D., et al., 2023).

Doctoral Thesis. It raises the importance of teaching management in the area of Social Work, with its complexity, rich in interactions, it takes up the importance of practice with the learning of the groups with which it interacts, (Noguero, F. L., 2022).

Book. The authors take up social challenges, security, the development of people, education, etc., in a constructionist exercise (Rangel, B. D. L., et al., 2023).

Book. It is oriented to the importance of interdisciplinarity (Ruelas, C. S. T., et al., 2023).

Article. Actions from the government, rectory and head of department to build various academic activities during the isolation by Covid. During the pandemic, the university community was confined, and from face-to-face to virtuality, in these circumstances various inclusive projects were developed, favoring group cohesion and resilience, (Saavedra, G.F., 2023).

Book. Social events are carefully reviewed and the essential changes through innovation are reflected on (Vilate Uribe, A., 2022).

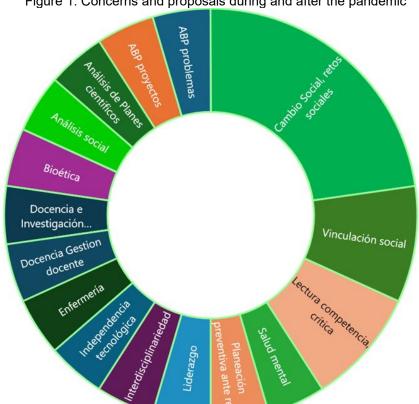


Figure 1. Concerns and proposals during and after the pandemic



The implementation of goals to soften the impact of the crisis was a success (Vilate Uribe, A., 2022; Mendoza Arenas, R. D., et al., 2023; Saavedra, 2023), the reflection reflected in proposals such as Problem-Based Learning and Project-Based Learning, is to reaffirm that the best way to learn is to direct teaching towards problem solving or the fulfillment of specific goals. This is of great importance because collective goals are promoted, addressing problems that affect societies or sections of them.

While it is true that the available resources are not enough, it is essential to advance in the planning and management of resources, to make efficient use of everything, trained personnel, consumable items, vaccines and in the face of the extreme limitation of resources, make decisions based on evidence and careful planning. The social demand has just begun, it has been a violent awakening, but changes are already beginning to be glimpsed from society in the election of its representatives to those social currents, for many what has happened is the progression of wrong decisions in the general policy oriented to the financial sector and far from social welfare, (Mendoza Arenas, R. D., et al., 2023; Leonor, V. P., Elena, L. R. L., & Escobosa, A. P., 2023).

Multidisciplinarity associated with the mastery of knowledge is the strategy that made it possible to contain the health crisis, learning has been forceful: "we need others", this leaves a lesson of how fragile societies are, of the importance of planning and continuous review of the curricula of all educational centers at all levels, demonstrating how important it is to promote skills to work in harmony, to understand that we work as a team not by the constant search for like-minded people, but by conviction in the face of social response.

Disenchantment and social discontent must be translated into actions to change, both the policies that seem not to serve the population, but to serve the population, which is disappointing. Using democracy to later deliver epic failures has been a very hard lesson, there are therefore many pending and changes are coming that will transform geopolitics (Valenzuela Feijoo, J. C., 2021; Almar, E. R., 2022; Toro Maureira, S., & Noguera, A., 2024).

CONCLUSIONS

The pandemic is the first global challenge that could be contained with multidisciplinary collaboration, failures must become objectives for their correction. It is essential to include educational strategies to strengthen the acquisition of skills aimed at collaboration and updating, as well as to abandon the reductionist vision that prevents us from seeing society in all its expressions and needs. We have gone from the written exam in the classroom to the examination of reality.

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