

CURRICULAR INTEGRATION OF DISASTER RESILIENCE EDUCATION IN THE TRAINING OF UNIVERSITY TEACHERS: A COMPREHENSIVE APPROACH

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Abstract.

This text focuses on the importance of integrating disaster resilience education in the training of university teachers. It begins by highlighting the current context, marked by the increasing frequency and intensity of natural and anthropogenic disasters, and the imperative need to prepare future generations to face and recover from such events. The curricular integration of disaster resilience education in teacher training programs is presented as a crucial step towards building more prepared societies. The benefits, challenges and best practices associated with this integration are explored, presenting a comprehensive approach that encompasses theoretical and practical aspects. The text is structured in three main sections: current context and importance of resilience education, strategies for effective integration into teacher training programs, and recommendations for future research and practice. The need for a multidisciplinary, participatory and community-based approach is highlighted. Then, a mixed method is proposed to investigate curricular integration, combining quantitative and qualitative methods, such as literature review,

surveys, and semi-structured interviews. Emphasis is placed on the importance of evaluating student learning and impact on the community. The article also addresses key principles of disaster resilience education, challenges in curricular integration, strategies for successful integration, and examples of universities already implementing this education. The crucial role of teachers in promoting disaster resilience is highlighted and a future is envisioned where this integration can prepare future educators to meet the challenges of the ever-changing world.

Keyword: Higher professional training, human disaster, social inclusion.

Introduction

In a world marked by the increasing frequency and intensity of natural and anthropogenic disasters, the need to prepare future generations to face and recover from such events becomes imperative. Disaster resilience education emerges as a fundamental component in the training of individuals capable of adapting, resisting and recovering from adverse situations, (Rojas & Recalde, 2017).

In this context, the training of university teachers acquires particular relevance, since these professionals not only have the responsibility of transmitting academic knowledge, but also of promoting socio-emotional skills and resilient practices in their students. The curricular integration of disaster resilience education in teacher training programs represents, therefore, a crucial step towards building societies more prepared and capable of facing the challenges of the 21st century, (Aguaded & Almeida, 2016).

In this article, we explore the importance of incorporating disaster resilience education into university teacher education, examining the benefits, challenges, and best practices associated with this integration. In addition, we present a comprehensive approach that covers both theoretical and practical aspects, with the aim of providing future teachers with the necessary tools to promote resilience in their students and communities (Araujo, et al., 2020).

This work is structured in three main sections, first, the current context of disasters and the importance of resilience education as an effective response is analyzed, then the strategies and methodologies for the effective integration of this approach in programs are explored. of teacher training. Finally, recommendations and reflections are presented for future research and practices in this constantly evolving field. In a world characterized by uncertainty and volatility, disaster resilience education not only becomes an essential component of academic training, but also a catalyst for the development of citizens engaged and prepared to face the challenges of tomorrow, (Rivera, 2021).

The curricular integration of disaster resilience education in the training of university teachers arises as a response to a global panorama marked by the increasing incidence and severity of catastrophic events, from natural disasters such as earthquakes, hurricanes and floods, to socioeconomic crises and armed conflicts, communities face a wide range of threats that test their ability to adapt and recover, (Ramos, 2021).

Historically, disaster preparedness has focused on response and mitigation measures, neglecting the crucial importance of cultivating resilience as a preventive and proactive approach, however, recent events have highlighted the need to take a more holistic approach. and future-oriented in

risk management and disaster preparedness, disaster resilience education has emerged as an interdisciplinary field that seeks to promote the development of skills and competencies that strengthen the capacity of individuals and communities to cope with and recover from crises and adversities from understanding risks and emergency planning, to strengthening support networks and fostering self-efficacy, resilience education encompasses a wide range of dimensions that go beyond technical knowledge, (Sandoval-Díaz & Orellana-Fonseca, 2021).

In this context, the training of university teachers emerges as a strategic point of intervention. Teachers not only have the potential to influence the attitudes and behaviors of their students, but also to play an active role in building more resilient communities. However, the effective integration of resilience education into teacher education programs faces various challenges, ranging from lack of resources and training to institutional resistance and curricular fragmentation. Despite these challenges, there are promising examples of initiatives that they are advancing in the integration of resilience education in the training of university teachers. These initiatives highlight the importance of participatory, community-based approaches focused on experiential learning. Furthermore, they highlight the need for interdisciplinary collaboration and the incorporation of innovative educational technologies to maximize the impact of resilience education (Melian-Savignon, et al., 2022).

This comprehensive approach responds to the social responsibility of educational institutions to train professionals trained not only in pedagogical knowledge, but also in skills to promote resilience and adaptability in adverse situations. By integrating disaster resilience education, the capacity is strengthened of teachers to lead meaningful and effective learning processes, and to actively contribute to the construction of safer communities prepared to face the challenges of the 21st century (Rivaldi, 2020).

Method and materials

To carry out research on the curricular integration of disaster resilience education in the training of university teachers, it is proposed to use a mixed approach that combines both quantitative and qualitative methods, this will allow obtaining a deep and holistic understanding of the topic, as well as as well as quantify certain relevant aspects.

A comprehensive review of the academic literature related to disaster resilience education and university teacher training will be conducted. Previous research, theories, models and best practices in the field will be sought. Surveys will be designed for university students, teachers and experts in education and disaster management. These tools will allow the collection of quantitative data on the perception, knowledge and skills related to disaster resilience in the context of teacher training (Zúñiga, et al., 2023).

In addition, semi-structured interviews will be carried out with university professors, academic managers and professionals in the field of disaster management. These interviews will delve into the experiences, opinions and recommendations of the participants regarding the curricular integration of disaster resilience education. A content analysis will be carried out on the qualitative data obtained through the interviews and the reviewed literature materials. This

analysis will identify patterns, emerging themes and significant relationships in the participants' responses. These elements will provide the necessary structure to carry out a rigorous and complete investigation on the curricular integration of disaster resilience education in the training of university teachers, with the aim of generating knowledge and practical recommendations for the improvement of educational programs in this area, (Sánchez-Alcaraz, et al., 2023).

Analysis of results

The curricular integration of disaster resilience education in the training of university teachers is a comprehensive approach that seeks to prepare future educators to face crisis and emergency situations effectively. This approach involves the inclusion of content related to risk management, disaster preparedness, and the promotion of resilience in the teacher training curriculum (Salguero, 2021).

Disaster Resilience Education

Disaster resilience education is essential to prepare future teachers and shape a society more prepared and adapted to the challenges of a changing climate. In this article, we will explore how integrating disaster resilience education curricula can enrich the training of university teachers. Using a holistic approach, we will focus on the integration of disaster resilience education into university teacher training programs (Malagón, et al., 2022). We will explore the different areas of the curriculum in which disaster resilience can be addressed, from teaching specific content to incorporating hands-on activities and simulations.

Additionally, we will examine the benefits of including disaster resilience education in university teacher training. From increasing awareness about the risks and challenges of a changing climate to acquiring practical skills and knowledge, this integration can prepare future teachers to deliver more informed and relevant instruction. Join us on this journey through the integration of the disaster resilience education curriculum in the training of university teachers and discover how this initiative can make a difference in the education of the future (Olivares, et al., 2023).

Importance of Curriculum Integration in the Training of University Teachers

The integration of the disaster resilience education curriculum in the training of university teachers is of vital importance. Teachers are key agents in preparing future generations to meet the challenges of a changing climate and associated potential disasters. By including disaster resilience education in teacher training, it can be ensured that future educators are equipped with the skills and knowledge necessary to address these topics effectively in the classroom, (Huanchi, et al., 2023).

Integrating disaster resilience education curricula into university teacher training can also help foster a culture of preparedness and resilience throughout society. By training teachers to teach about disaster resilience, you are creating a chain of transmission of knowledge and practices that extends beyond the classroom, reaching students' communities and homes.

Comprehensive Approach to Curriculum Integration

The integration of the disaster resilience education curriculum in the training of university teachers must take a comprehensive approach. This involves addressing disaster resilience from

different perspectives and curriculum areas, ensuring a holistic understanding of disaster-related challenges and solutions.

The comprehensive approach to curriculum integration includes teaching specific content related to disaster resilience, such as understanding natural and human risks, emergency planning and disaster management. In addition, practical activities and simulations must be incorporated that allow future teachers to experiment and apply the concepts learned in real situations (Carreño, 2023).

Key Principles of Disaster Resilience Education

Disaster resilience education is based on a series of key principles that should guide the integration of the curriculum in the training of university teachers. These principles include:

Risk-based approach: Disaster resilience education should focus on understanding and managing the risks associated with disasters, both natural and human-caused.

Active participation: Students must be actively involved in the learning process, participating in practical activities and simulations that allow them to experiment and apply the concepts learned.

Multidisciplinary approach: Disaster resilience education must address challenges from a multidisciplinary perspective, integrating knowledge and practices from different fields, such as science, urban planning, psychology and sociology.

Promoting community resilience: Disaster resilience education should promote resilience at the community level, encouraging community participation and collaboration in disaster planning and management (Salguero, 2021).

Challenges in the Integration of Disaster Resilience Education in the Training of University Teachers

Despite the obvious benefits of integrating the disaster resilience education curriculum into university teacher training, there are challenges that must be overcome for successful implementation. Some of these challenges include:

Lack of resources: Integrating disaster resilience education curriculum requires adequate resources, such as teaching materials, simulation equipment, and subject matter experts. Lack of resources can make it difficult to effectively implement disaster resilience education.

Resistance to change: The integration of disaster resilience education curriculum may face resistance from some members of the educational community who may consider this approach not relevant or priority.

Lack of teacher training: Teachers charged with providing disaster resilience education may not be adequately trained to teach on these topics. It is essential to provide them with the necessary training and support so that they can effectively transmit the concepts and skills related to disaster resilience (Ramos, 2021).

Strategies for Successful Curriculum Integration: Despite the challenges, there are strategies that can facilitate the successful integration of the disaster resilience education curriculum into the training of university professors. Some of these strategies include:

Development of educational materials and resources: It is essential to have adequate educational materials and resources that support the teaching of disaster resilience education. These materials must be accessible, updated and adapted to the needs of future teachers.

Interdisciplinary collaboration: Disaster resilience education curriculum integration can benefit from collaboration between different academic disciplines and university departments. This allows for a more complete understanding of the challenges and solutions related to disasters, as well as a greater diversity of perspectives, (Álvarez, 2018).

Experience-based education: Disaster resilience education should be experiential, engaging students in hands-on activities and simulations that allow them to apply acquired knowledge and skills in real situations.

Examples of Universities that Implement Disaster Resilience Education in Teacher Training Programs

Several universities are already implementing disaster resilience education in their teacher training programs. These examples highlight the diversity of approaches and strategies used to integrate disaster resilience education curriculum into university teacher training. The university has developed a teacher training program that integrates disaster resilience education into all areas of the curriculum. . Students participate in practical activities, such as simulations of emergency situations, and learn to apply concepts related to disaster resilience in different educational contexts (Rivera, 2021).

Likewise, at this university, disaster resilience education is addressed through an interdisciplinary approach. Students from different majors, such as environmental sciences, education, and sociology, collaborate on research projects and hands-on activities that promote community resilience and disaster preparedness.

Assessment and Evaluation of the Integration of Disaster Resilience Education

The evaluation and evaluation of the integration of the disaster resilience education curriculum in the training of university teachers is essential to ensure the effectiveness of this initiative. Some ways to evaluate and evaluate integration include:

Assessment of student learning: Assessment mechanisms should be developed to measure student learning related to concepts and skills related to disaster resilience. This may include exams, projects, and practical assessments (Ramos, 2021).

Community impact assessment: It is important to evaluate the impact of disaster resilience education on the community. This may include conducting surveys and interviews to measure the community's level of knowledge and preparedness regarding disasters.

The Role of Teachers in Promoting Disaster Resilience Education

Teachers play a key role in promoting disaster resilience education. As role models and classroom leaders, teachers can influence the awareness and practice of disaster resilience among students. It is essential that teachers are adequately trained and committed to integrating disaster resilience education into their teaching (Rivaldi, 2020).

Future of Curriculum Integration in University Teacher Training.

Integrating disaster resilience education curricula into university teacher training offers exciting opportunities to prepare future teachers and promote a society more prepared and adapted to the challenges of a changing climate. Through a comprehensive approach, effective strategies, and interdisciplinary collaborations, we can ensure that future teachers are equipped with the knowledge and skills necessary to address disaster resilience effectively in the classroom and beyond. The future of curriculum integration in university teacher training depends on our commitment and dedication to overcoming the challenges and seizing the opportunities offered by disaster resilience education. By working together, we can create a safer and more sustainable future for future generations (Carreño, 2023).

Conclusion

Integrating disaster resilience education curricula into university teacher training is a valuable approach that prepares future educators to meet the challenges of natural disasters. While there are challenges in implementation, the benefits far outweigh the difficulties.

To achieve successful integration, the commitment of educational institutions, adequate training for teachers and access to specialized resources and tools is necessary. By investing in disaster resilience education, you are investing in the safety and well-being of school communities and in preparing future generations to meet the challenges of the ever-changing world.

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