



Teacher education is a deeply pedagogical process rooted in values, ethics, and the social purpose of schooling. Globally, it sits at the core of educational quality and fairness, as research in comparative and international education demonstrates: the training of teachers directly influences students' learning chances, social inclusion, and the democratic aims of schools. Teachers are not simply transmitters of curricula, but active professionals whose convictions, reflective skills, and ability to manage the complexities of classroom life give shape and substance to the educational experience itself.

The pedagogical dimension of teacher education frames teaching as a relational, context-aware, and ethically grounded profession rather than just a set of procedural skills. From a research perspective, this demands robust research methodologies that can critically examine the complex realities of schools and inform evidence-based policies. Equally important is the connection between theory and practice, which helps to bridge the persistent gap between universities and schools.

The contributions gathered in this volume reflect the richness and diversity of experiences showcased during the ATEE Spring Conference 2024, held at the University of Bergamo from May 29 to June 1, 2024. The volume presents 70 selected papers out of more than 300 presented by researchers representing over 40 countries.

This broad spectrum of studies highlights promising directions that can inspire renewed inquiry and concrete proposals aimed at improving contemporary educational systems.

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Teacher education research in Europe: trends, challenges, practices and perspectives

May 29th – June 1st, 2024
S. Agostino, Bergamo



Edited by Nicole Bianquin and Francesco Magni





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BOOK OF PROCEEDINGS

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Emergency and people with intellectual disabilities. Teachers' training in the LEBEL proposal

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Abstract

The various contexts of life are marked by a high degree of unpredictability that, at times, can reach challenging levels capable of disorienting and destabilizing the routine of everyday life. Risk or emergency situations, such as natural disasters, traumatic events or particular health circumstances, raise a number of complex challenges for societies as a whole, but also specifically for those who experience a condition of vulnerability, such as people with disabilities. Within the framework of these considerations sits the international Erasmus + project "I learn and get beyond my limits" - LEBEL carried out by the Center for Studies and Research on Disability and Marginality of the Catholic University of the Sacred Heart (CeDisMa) in collaboration with four European countries (in addition to Italy, Turkey, Belgium, North Macedonia). The project aimed to produce teaching materials and train teachers and education professionals in emergency management for people with intellectual disabilities and autism spectrum disorders.

Keywords: emergency; risk and vulnerability; intellectual disability; autism spectrum disorder; inclusive education.

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1. The Complexity of Modern Emergencies

The nature and impact of emergencies have undergone profound changes in recent decades, reflecting the increasing complexity of modern life. No longer confined to localized or predictable events, contemporary emergencies encompass a broad spectrum of challenges, ranging from natural disasters to technological disruptions and global health crises. Ulrich Beck's theory of the "Risk Society" provides a critical lens for understanding these phenomena, emphasizing how modernization, globalization, and industrialization have introduced new, systemic risks that transcend geographical, temporal, and social boundaries. These risks are not merely incidental but are deeply embedded in the fabric of contemporary life, presenting unique challenges for governments, institutions, and individuals alike.

One defining characteristic of modern emergencies is their interconnected nature. A seemingly isolated event in one part of the world can quickly escalate into a global crisis due to the interdependence of systems and infrastructures. For example, the COVID-19 pandemic, which originated as a localized outbreak, rapidly evolved into a worldwide health emergency with far-reaching economic, social, and psychological repercussions. Similarly, climate change has amplified the frequency and severity of natural disasters, such as hurricanes, wildfires, and floods, disrupting communities and economies on an unprecedented scale. Beck's work highlights how these risks, while often invisible or underestimated, have the potential to disrupt societal stability and erode trust in institutions, underscoring the need for a more holistic approach to risk assessment and management.

Adding to the complexity is the role of technology in shaping modern emergencies. While technological advancements have brought significant benefits, they have also introduced new vulnerabilities. Cyberattacks, data breaches, and critical infrastructure failures exemplify how dependent modern societies have become on digital systems. Events like the Microsoft CrowdStrike incident, which caused global disruptions due to a faulty software update, illustrate the cascading effects of technological failures on transportation, healthcare, and other vital sectors. These scenarios reinforce the importance of developing resilient systems capable of withstanding and recovering from such disruptions.

The perception of risk also plays a crucial role in shaping responses to emergencies. Scholars like Paul Slovic argue that risk is not purely an objective phenomenon but is deeply influenced by emotional, cultural, and cognitive factors. Public attitudes toward risk can vary widely, often leading to discrepancies between the actual severity of a threat and its perceived importance. For instance, while climate change poses an existential threat, it is often downplayed in favor of more immediate concerns, such as economic instability or public health crises. Understanding these dynamics is essential for designing effective communication strategies and fostering a culture of preparedness. Emergencies also reveal and exacerbate existing inequalities, particularly for vulnerable populations, such as individuals with disabilities, low-income communities, and marginalized groups. Research has shown that these populations often face disproportionate impacts during crises, whether due to limited access to resources, inadequate infrastructure, or systemic discrimination. Along these considerations, it is essential to consider the pivotal role of education in preparing individuals and communities for emergencies. Schools, as central hubs of community life, are uniquely positioned to disseminate knowledge and foster skills that enhance preparedness and resilience. Incorporating emergency response training into educational curricula, particularly for vulnerable populations, can significantly improve outcomes during crises. Moreover, professional development programs for educators and administrators can equip them with the tools to address the specific needs of diverse learners, including those with disabilities. These efforts reflect the broader shift toward inclusive and adaptive strategies in emergency management, as emphasized by contemporary scholarship.

In this way, emergencies can become an opportunity to build more equitable and resilient communities, where diversity is embraced as a strength rather than a challenge. It is also worth mentioning that the adoption of inclusive strategies to deal with emergency situations has also been recognized as a priority by major international organizations and, in this regard, the 2006 UN Convention on the Rights of Persons with Disabilities emphasizes the right to be involved in all phases of emergency management, from planning to response and reconstruction. This underscores the

urgent need for a paradigm shift in emergency management - one that prioritizes inclusivity, anticipates systemic vulnerabilities, and empowers all individuals, particularly those from marginalized and vulnerable groups, to actively participate in shaping resilient and equitable responses to the complex challenges of modern emergencies.

2. Disability in emergency scenarios between management challenges and inclusive education

Natural disasters and emergencies can have a devastating impact on everyone's life. During an earthquake, hurricane, flood or any other natural disaster, however, those with disabilities face additional, often unique and significant challenges due to their specific vulnerability. The intersection between disability and disasters highlights the need for a thorough understanding, especially by emergency professionals - but also by those involved in education, of the multiple factors that can intervene and for the definition of inclusive intervention plans that address the diverse needs of individuals with disabilities.

These plans must consider not only physical accessibility but also communication barriers, sensory sensitivities, and behavioral challenges that may arise during high-stress situations. For instance, individuals with intellectual disabilities or autism spectrum disorders may struggle to understand evacuation procedures or adapt to sudden changes in their environment, emphasizing the importance of clear, simple, and accessible communication methods. Another example concerns how emergencies can impact changes in daily routines. People with this type of frailty often benefit profoundly from precise planning of daily time and the establishment of daily routines that allow them to reduce and manage anxiety and feel more secure in their surroundings. The sudden interruption or alteration of these routines during an emergency or natural disaster can trigger disorganized behavior and difficulties in adapting. The need for those around them, e.g. a family member, teacher or educator, to move quickly, make sudden decisions and interact with strangers, such as rescuers, can also increase the level of anxiety and cause avoidance, withdrawal or resistance behavior, which would increase risk and danger factors.

To mitigate these risks, it is essential to provide tailored training and resources to families, teachers and professionals, enabling them to respond effectively to the specific needs of individuals with disabilities during emergencies. This includes developing individualized emergency plans that consider personal communication styles, sensory preferences, and coping strategies. For instance, visual schedules, social stories, or portable sensory kits can serve as essential tools to help individuals with disabilities navigate the chaos and uncertainty of a crisis.

Based on these considerations, we can understand the pivotal role of the teachers and educators of the different school orders: they can play a critical role by incorporating spaces for reflection within their educational programming on crucial topics such as individual and group safety. These moments of reflection can serve as opportunities to foster a culture of awareness, preparedness, and inclusion among all students. By adopting a methodological perspective that aligns with the principles of Universal Design for Learning (UDL), teachers can ensure that these discussions are accessible and meaningful to a diverse range of learners. Through the UDL framework, teachers can design activities and lessons that provide multiple means of engagement, representation, and action to accommodate the varied needs and abilities of their students. For example, interactive activities like role-playing emergency scenarios, creating visual evacuation plans, or using digital tools for simulations can help students with different learning styles or functions profile engage with safety concepts, in ways that resonate with them.

Additionally, these reflective spaces can be an opportunity to encourage collaborative problem-solving and peer support, where students learn to recognize and respect the diverse needs of their classmates, including those with disabilities. This not only enhances safety awareness but also builds empathy and a sense of shared responsibility within the classroom community. Schools, as central hubs of community life, can also extend these practices beyond the classroom by involving families and community stakeholders in inclusive emergency drills or workshops, thereby promoting a holistic approach to safety and inclusion.

By embedding these discussions into the broader curriculum, teachers can go beyond simply preparing each student for emergencies – they can foster a mindset of inclusivity and adaptability that extends into all areas of life. This proactive approach not only ensures that students with disabilities are fully included in emergency planning but also helps create a more equitable and supportive learning environment for all, thus fully embracing the concept of widespread inclusion. Only by fostering a culture of preparedness and inclusion, we can ensure that the principles of equity, dignity, and respect are upheld, not just in times of crisis but in all aspects of everyday life.

3. The LEBEL Project: the role of teachers' training

In the context of the above considerations, the work related to the international Erasmus + project 'I learn and get beyond my limits' – LEBEL, which started in January 2020 and ended in November 2022, is of considerable importance. The project, conceived within the research team of AFAD – Disaster and Emergency Management Authority, i.e. the authority of the Turkish Ministry of the Interior that is responsible for managing disasters and maxi-emergencies, was thus developed over a two-year period thanks to the fruitful cooperation of organizations from four European countries (Italy, Belgium, North Macedonia, as well as Turkey) involved, in various capacities, in the promotion of inclusive actions and processes to support people with intellectual disabilities and autism spectrum disorders. The main objective was the development of operational and educational tools aimed at assisting people with autism and intellectual disabilities in the process of adaptation and survival in emergency situations and natural disasters. In particular, the project focused on the creation of educational resources and materials aimed at equipping these persons with the necessary skills to cope with the different phases of a hazardous situation. This included learning evacuation and self-protection techniques, the ability to communicate with emergency responders such as law enforcement and medical personnel, as well as understanding and implementing strategies to cope with and overcome various risks during and after an emergency.

It was deemed appropriate, at the project drafting stage, to reflect on the activation of two intervention plans:

- Plan of preventive nature, aimed at raising awareness of these issues among all the network's stakeholders;
- Plan of managerial nature, aimed at implementing inclusive strategies to respond effectively to crisis situations.

With regard to the first plan – the focus of this paper – special attention was paid to the school, as a potential crossroads for intercepting and involving pupils and families.

For this reason, an interesting and important aspect of the project was the design of inclusive training courses for teachers of schools of various levels. The teacher training program was designed to be both theoretical and practical, equipping educators with knowledge about the specific challenges faced by individuals with disabilities in emergencies and providing concrete strategies to support them. Topics included understanding sensory sensitivities, managing anxiety during evacuations, and fostering effective communication between students, families, and emergency personnel. By integrating these elements into their pedagogy, teachers could create safer and more inclusive learning environments that extend into crisis situations.

The training sessions began with an overview of the specific vulnerabilities experienced by students with intellectual disabilities and autism spectrum disorders in high-stress situations, such as difficulty processing verbal instructions, sensory overload, and heightened anxiety. Educators were guided on how to identify early signs of distress in students and implement personalized interventions to help them remain calm and focused during emergency scenarios. For instance, teachers learned to use visual schedules and pictograms as effective tools for communicating evacuation procedures in a way that is easily understood. Role-playing exercises were included to simulate real-life situations, allowing teachers to practice giving clear, simple instructions and providing reassurance to students who might become overwhelmed.

A significant portion of the program was dedicated to managing anxiety, which is a common challenge for students with disabilities in unfamiliar or chaotic environments. Teachers were trained in techniques such as deep-breathing exercises, the use of calming sensory objects, and strategies for creating “safe spaces” during evacuations. These methods were designed to help students regulate their emotions and reduce the risk of behavioral outbursts that could hinder their safety or the safety of others.

With regard to the second plan, the project created a number of tools to be implemented in the various phases of intervention and which constitute a valuable resource for addressing emergency situations effectively and inclusively, providing practical solutions that can be adapted to diverse contexts and tailored to the specific needs of individuals with disabilities. Among the main tools are: Visual Vocabulary of terms related to emergencies and disasters. The vocabulary not only describes scenarios or technical terms related to disasters and emergencies, but does so through the integration of pictograms designed to be universally recognizable. These visual symbols, distributed under a Creative Commons license by ARASAAC, have been selected and modified to suit the emergency context. They enable everyone, including rescuers and first responders, to communicate effectively with people with language difficulties.

Visual aids for specific relief areas. Social Stories represent a powerful tool not only for prevention but also for intervention during emergencies, especially when conditions are relatively stable. These structured narratives, often accompanied by images, offer step-by-step guidance on how individuals with disabilities can manage specific situations, such as waiting in a shelter, interacting with emergency personnel, or navigating an unfamiliar environment. By presenting scenarios in a clear and predictable format, Social Stories help reduce anxiety and empower individuals to take appropriate actions, fostering a sense of control even in stressful circumstances.

Useful recommendations for rescuers. In emergency situations, the effectiveness of the intervention of rescuers and medical personnel can make the difference between life and death. Every second counts, and an appropriate, timely and personalized response can not only save a life, but also ensure the physical and emotional well-being of the person rescued. However, each individual is unique, and this uniqueness is also reflected in the way each of us reacts to situations of stress, fear and pain. The international team involved in the LEBEL project developed two guidelines for rescuers with specific recommendations for people with autism and Down syndrome².

We can therefore understand how teachers, as pivotal figures in the educational ecosystem, have the power to drive transformative actions that extend beyond the classroom. By equipping educators with the knowledge, tools, and strategies necessary to respond effectively to emergencies in an inclusive way, the project lays the foundation for a culture of preparedness and resilience that embraces diversity and fosters equity. Investing in teacher training programs ensures that these values become embedded in educational practices, creating ripple effects that contribute to a more inclusive and sustainable society where no one is left behind, even in the most challenging circumstances.

4. Future research directions for promoting inclusion in all life contexts

Innovation, sustainability, social and civic responsibility, public engagement: these are the keywords that guided the project idea, first, and its concrete realization, then, of the course realized within the program ‘I learn and get beyond my limits’ - LEBEL. The challenge that has guided the work of the international research group from the early planning stages has been to offer its own contribution, with its own reflections and the realization of operational proposals, to draw academic, as well as public, attention to an issue that is in many respects still submerged and little explored.

Building on the project’s success, future research should focus on further integrating inclusive practices into emergency management, education, and community resilience frameworks.

² All materials are available at this address: <http://afadotizmdown.ogu.edu.tr/moodle/>.

One critical direction is the development and evaluation of advanced assistive technologies that can enhance accessibility during emergencies. Research could explore the use of artificial intelligence, wearable devices, and augmented reality to support individuals with disabilities in navigating complex scenarios, such as evacuations or communication with first responders. These technologies should be tested and adapted to different cultural and environmental contexts, ensuring their effectiveness across diverse settings.

Additionally, research should delve into the intersection of family dynamics and inclusion, examining how to better equip families to act as agents of support and resilience in times of crisis. This includes studying the effectiveness of family-centered intervention programs and identifying the resources families need to feel confident and prepared.

Finally, promoting public engagement and raising awareness about the needs of individuals with disabilities in emergencies must remain a priority. Future research should focus on developing community-based initiatives that bring together educators, emergency professionals, policymakers, and families to co-create inclusive solutions. By fostering collaboration across sectors, research can contribute to building societies that value and actively promote inclusion in all life contexts. In a perspective, therefore, aimed at the innovation and sustainability of the choices that concretely shape the inclusive logic, the synergic meeting of cultural actions and processual nature always outlines new horizons for the experimentation and consolidation of effective practices, which can be found in the different environments of life, for the benefit of any individual, thus overcoming the 'special' dimension of the different evolutionary needs.

In order not to close, but to open up new spaces for reflection, it seems appropriate to mention what Canevaro, an authoritative figure in Italian and international special pedagogy, already expressed in this regard, stating that: 'inclusion always travels', thus emphasizing the dynamic character by which it is characterized, and the impossibility of promoting it by focusing only on distinct and independent contexts.

Through this metaphor, it becomes clear how the processes aimed at ensuring the quality of life for each individual and for all translate into a continuous progression toward a constantly evolving goal, one that is continually redefined, achieves new milestones, and is enriched with new meanings, adapting to the social and cultural changes that traverse different contexts.

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