

Exploration of Teaching Reform in Emergency Management Courses under the "New Liberal Arts" Context

Xi Zhang, Wenxu Deng

School of Business, University of Shanghai for Science and Technology, Shanghai 200093, China DOI: 10.32629/jher.v5i4.2618

Abstract: The "New Liberal Arts" initiative advocates breaking free from traditional liberal arts thinking, fostering cross-disciplinary integration and fusion across multiple fields, while shifting the focus from discipline-centric to socially-driven needs. In this context, emergency management courses must adapt to the evolving demands of talent cultivation and educational reform. This paper outlined four key requirements, examined the current state of course instruction, and proposed reform measures such as enhancing practical training, strengthening industry-education integration, incorporating interdisciplinary knowledge, and embedding ideological and political elements. These efforts aimed to comprehensively improve teaching quality, cultivating emergency management professionals equipped to meet the challenges of the new era.

Keywords: emergency management; new liberal arts; teaching reform; teaching quality

1. Introduction

In November 2020, the Ministry of Education in China issued the "Declaration on the Construction of New Liberal Arts," which set new standards for the development of liberal arts education in the new era (Jiang and Zhang, 2023). The declaration emphasized the need to accelerate innovation in liberal arts education, actively promoting the deep integration of modern information technology with liberal arts disciplines, and upgrading existing programs. This necessitates the continuous optimization of curriculum structures, the introduction of emerging technologies, and cross-disciplinary content in course construction. It also calls for the establishment of cross-disciplinary and cross-professional emerging interdisciplinary courses and practical teaching courses to cultivate students' ability to integrate and apply knowledge across fields (Zhang, 2021).

Under the "New Liberal Arts" framework, liberal arts education faces the challenge of comprehensive transformation and innovative development. Emergency management, as an essential component of public administration and social governance, has been constructed on a large scale in parallel with China's advancement of the New Liberal Arts initiative. Currently, the frequent occurrence of natural disasters, public health emergencies, and sudden social issues globally has raised higher demands for the comprehensive qualities and response capabilities of emergency management professionals. Traditional emergency management instruction, however, faces limitations in goal setting, content, and methods, making it difficult to meet the demands of the new era. Therefore, exploring and advancing the reform of emergency management course teaching is imperative. Optimizing curricula, innovating teaching models, and enhancing practical skills have become critical tasks in advancing the New Liberal Arts.

2. Requirements of "New Liberal Arts" for Emergency Management Courses

The "New Liberal Arts" is rooted in the global technological revolution, the development of the new economy, and the era of socialism with Chinese characteristics. It emphasizes breaking away from traditional liberal arts constraints, fostering interaction and integration across disciplines, and shifting the focus from a discipline-oriented to a demand-oriented approach(Mao, 2022). Based on the "Declaration on the Construction of New Liberal Arts," the requirements for emergency management courses under this framework can be summarized by four types of "integration".

2.1 Integration of Humanities and Science Thinking

The "New Liberal Arts" emphasizes the integration of humanities and science thinking, which poses new requirements for emergency management courses, specifically in balancing students' development in both areas. This integration involves combining the sensitivity, comprehensiveness, and creativity of humanities with the rationality, logic, and empirical spirit of sciences. This approach aims to cultivating students' ability to think more holistically and solve problems more effectively in emergency management. Courses should focus on developing students' humanistic qualities, logical thinking, and

communication skills, helping them analyze issues from multiple perspectives and propose more comprehensive and humancentered solutions. Simultaneously, students' abilities in data analysis, model construction, and problem-solving should be strengthened, enabling them to apply quantitative analysis, data modeling, and simulation experiments to address real-world complex issues.

2.2 Integration of Cross-Field Knowledge

Emergency management requires knowledge across multiple fields, including natural sciences, social sciences, and engineering. The "New Liberal Arts" mandates that emergency management courses achieve multidisciplinary integration to construct a comprehensive knowledge system. This cross-disciplinary integration helps students apply knowledge and methods from various fields, leading to more scientifically informed and rational decisions when dealing with complex emergency management issues.

2.3 Integration of Theory and Practice

The "New Liberal Arts" underscores the organic combination of theory and practice, which emergency management courses should align with. Beyond systematically teaching the fundamental theories and knowledge of emergency management in classrooms, it is crucial to involve students in emergency drills, case studies, and field investigations to boost their emergency response skills and hands-on experience. The tight integration of theory and practice will enable students to better apply their knowledge more effectively to real-world scenarios, thereby improving the overall efficiency and effectiveness of emergency management.

2.4 Integration of Ideological and Political Education

The construction of "New Liberal Arts" mandates the integration of contemporary ideological concepts into emergency management courses, ensuring they are closely aligned with the theory of socialism with Chinese characteristics to bolster students' confidence in both their theoretical understanding and the chosen path. In teaching, emergency management courses should incorporate Chinese case studies, emergency management policies, and significant events to fully inspire students' patriotism and sense of social responsibility. These measures will allow the courses to better serve the cause of socialism with Chinese characteristics in the new era, cultivating high-quality emergency management professionals with patriotism, social responsibility, and a global perspective.

3. Analysis of the Current State of Emergency Management Course Teaching

3.1 Overemphasis on Theoretical Knowledge, Lack of Practicality

Current emergency management courses often focus heavily on theoretical knowledge while neglecting the systematic and in-depth development of practical training. As a highly applied discipline, emergency management requires not only adequate training facilities or simulated scenarios but also experienced instructors to guide practical exercises. Although some universities have established emergency management simulation labs offering practical courses such as emergency rescue skill training, simulation-based exercises, and scenario-based drills, supported by modern tools like VR emergency management simulators, traffic rescue training systems, and mixed-reality accident scenario platforms, the frequency and duration of hands-on practice remain insufficient. Most students engage in these practical courses only as passive listeners or observers. This shortage of practical training means that while students may gain a thorough understanding of theoretical concepts in the classroom, they struggle to translate this knowledge into practical skills when confronted with real-world emergencies. Consequently, their ability to respond effectively in complex emergency management situations is limited. This deficiency not only impedes the development of students' emergency response skills but also hampers their problem-solving abilities in professional settings, making it difficult for them to meet the increasingly complex demands of contemporary emergency management.

3.2 Disconnection Between Course Content and Actual Needs

One of the main reasons for the disconnection between emergency management courses and real-world needs is the insufficient depth of industry-academia collaboration. Although some universities have recognized this issue and seek partnerships with businesses, these collaborations often remain superficial and lack substantial, in-depth interaction. Typically, university-industry cooperation is confined to short-term internships or company tours, during which students cannot fully engage in emergency management practices, resulting in inadequate acquisition of valuable work experience and skills. This superficial cooperation fails to bridge the gap between theory and practice, leaving students unprepared for complex real-world tasks after graduation and diminishing their competitiveness.. Furthermore, the limited involvement of industry experts

in course design and teaching means that course content often fails to keep pace with industry needs, lacking contemporary industry perspectives and practical experience. Consequently, course content remains outdated, not reflecting the latest technological advancements or policy changes. Despite receiving systematic theoretical education, many students only have superficial internship experiences, with little exposure to core emergency management tasks and key technologies, which further weakens their professional competitiveness. The lack of a robust and sustainable cooperation framework between universities and industries, characterized by short-term, goal-uncertain collaborations, leads to insufficient improvements in the quality of emergency management talent cultivation.

3.3 Lack of Cross-Disciplinary Knowledge Transfer

Emergency management, being a highly comprehensive discipline, requires students to not only master core emergency technologies and management knowledge but also possess a broad cross-disciplinary perspective. However, current emergency management courses are often restricted to within their own discipline, lacking the integration of cross-disciplinary knowledge. This limitation hampers students' ability to effectively integrate and apply knowledge from various fields when confronting real-world emergency management challenges. Several factors contribute to this issue: First, course design overly focuses on core content within the discipline, neglecting connections with other related disciplines, resulting in content that is too narrow to meet the diverse knowledge demands of the field. Second, the traditional education system's rigid disciplinary boundaries limit the opportunities for cross-disciplinary integration, thereby constraining students' ability to develop a comprehensive cross-disciplinary perspective and integrative thinking skills. Additionally, many instructors lack a cross-disciplinary background, making it difficult for them to effectively incorporate knowledge from other disciplines into their teaching, thus depriving students of a richer cross-disciplinary learning experience. These issues limit the comprehensiveness of emergency management courses, weakening students' innovative thinking and ability to address complex problems. Therefore, improving course design, breaking down disciplinary silos, and promoting the integration of cross-disciplinary knowledge are key to enhancing students' emergency management capabilities.

3.4 Insufficient Ideological and Political Education

Current emergency management courses tend to focus more on the transmission of technical and management skills, frequently neglecting broader social issues such as social responsibility, humanistic care, and ethical considerations. This focus on technical skills tends to marginalize ideological and political education,, preventing it from taking root in students' minds. While students acquire professional techniques and knowledge in emergency management, they may lack a deep understanding of social responsibility and respect for human life and rights. Even when some courses recognize the importance of incorporating ideological and political education, the integration often remains superficial due to inadequate curriculum design. Courses may briefly touch on ethical norms or social responsibility without engaging in deeper discussions through case analysis, debates, or reflections on ethical dilemmas and social justice issues in emergency management. Such surfacelevel ideological education fails to stimulate students' moral sentiments and sense of social responsibility, potentially leading them to perceive emergency management as merely a technical field, overlooking the underlying humanistic and ethical challenges. Moreover, the lack of organic integration between ideological education and professional content often leaves students feeling that this is an irrelevant add-on, reducing their interest and the effectiveness of the education. To address this, instructors need to more deeply explore and expand the content of ideological education within the course design, closely linking it with emergency management professional knowledge. This approach can ensure that students not only master technical and management skills but also develop a strong sense of social responsibility and humanistic care, better preparing them to serve society in the future.

4. Pathways for Teaching Reform

4.1 Enhancing Practical Teaching in Emergency Management Courses

To improve students' practical abilities, it is essential to optimize the design of practical courses by increasing their weight to over 40% of the curriculum. This adjustment will provide students with more hands-on opportunities to apply theoretical knowledge in real-world scenarios. Each semester should feature concentrated practical training courses that are incorporated into the credit system, ensuring students take these opportunities seriously. Diversifying teaching methods is also crucial, incorporating activities such as role-playing, case analysis, field research, and team-based exercises. For instance, students could design emergency response plans and test them in simulated environments, which would not only boost their creativity but also foster teamwork skills. Furthermore, fostering collaboration with related disciplines, such as environmental science, public health, and engineering management, can lead to the development of interdisciplinary

practical projects. These projects could include comprehensive drills for responding to environmental pollution incidents, covering various aspects like environmental monitoring, pollution control, emergency evacuation, and information dissemination, thereby training students in a more integrated manner. To ensure the effectiveness of practical teaching, a scientific evaluation system should be established to assess students' operational skills, plan-making abilities, teamwork, and innovation. Regular assessments and feedback will help adjust teaching content and methods accordingly. Additionally, introducing self-assessment and peer-assessment mechanisms can increase the interactivity and depth of practical teaching, as students learn from each other and share experiences during group discussions.

4.2 Deepening Industry-Education Integration

Addressing the disconnect between emergency management courses and actual industry needs requires a deeper integration of education and industry. Universities and enterprises need to forge long-term, stable partnerships that go beyond short-term internships or company visits. Instead, they should design more in-depth practical projects that allow students to genuinely engage in the emergency management work of enterprises, giving them hands-on experience with core technologies and critical processes, thus accumulating valuable work experience. Industry experts should be involved from the course design stage to ensure that the content closely aligns with industry needs and technological developments. This could be achieved through co-developing courses, writing textbooks, and hosting lectures, bringing the latest industry perspectives and practical experience into the classroom. To make this cooperation more sustainable and effective, universities and enterprises need to establish a comprehensive collaboration mechanism, clearly defining their goals and responsibilities, and jointly investing in emergency management talent cultivation projects. Proper resource and benefit allocation will create a win-win situation, enabling students to learn the latest technologies and policies during their studies and better prepare them for the complex challenges of the emergency management industry upon graduation.

4.3 Integrating Cross-Disciplinary Knowledge into the Classroom

Integrating cross-disciplinary knowledge into emergency management courses can be effectively achieved by having multiple instructors from various fields collaboratively design and teach these courses. Instructors should not be limited to the same department but can extend across different departments. For example, an instructor from the Artificial Intelligence (AI) department could actively participate in the design and teaching of an emergency management course by introducing a module on "Generative AI in Emergency Management," which combines Generative AI technologies (AIGC) with the "4R" theory of crisis management (Reduction, Readiness, Response, Recovery). This approach would allow students to use AIGC technology to digitize and automate the four phases of the 4R theory, thereby improving the efficiency of emergency management (Peng, 2020). Before allocating instructor resources, it is crucial to first understand the specific cross-disciplinary knowledge areas required in emergency management courses, such as psychology, sociology, and management science. Subsequently, instructors with diverse academic backgrounds and expertise should be recruited to participate in course design. These instructors should collaborate to draft the course syllabus, dividing the content according to each instructor's expertise, ensuring that the knowledge from different disciplines is seamlessly integrated into the emergency management curriculum. Moreover, regular exchanges of teaching outcomes among cross-departmental faculty should be encouraged, along with the organization of interdisciplinary project collaborations. This will allow students to experience the comprehensive application of knowledge from various disciplines through practical projects.

4.4 Integrating Ideological and Political Education with Chinese Contexts

Incorporating ideological and political (I&P) education into emergency management courses is an effective approach to enhancing students' overall qualities, fostering a sense of social responsibility, and cultivating a strong sense of mission. Emergency management itself is rich in I&P elements, such as the foundational theories of "Two Upholds" and "Bottom-Line Thinking, as well as the principles of prioritizing people and valuing life, which are highlighted in the context of disaster relief efforts like flood and earthquake responses. Instructors should delve deeply into these I&P elements and seamlessly integrate them into the course material, ensuring that students, while acquiring professional knowledge, are also subtly influenced by the values and ethos embedded in I&P education. This dual approach helps students not only understand the technical aspects of emergency management but also internalize the social and moral responsibilities that come with it.

To enhance the effectiveness of I&P education, instructors should employ a variety of teaching methods. One approach is to explore and present representative and inspiring Chinese emergency management case studies. By linking theoretical knowledge of emergency management with real-world social practices, the appeal and relevance of I&P education are enhanced, making the content more engaging and easier for students to absorb (Gu, 2024). For instance, discussing the spirit of unity, selflessness, and mutual support demonstrated by Chinese society during rescue operations in a major earthquake can vividly convey the collective spirit and traditional virtues of the Chinese people. This not only reinforces technical

learning but also instills in students the values of teamwork and social responsibility.

Moreover, I&P education should be woven into practical training sessions, allowing students to learn and grow within specific contexts. By simulating emergency management scenarios unique to China, students can engage in role-playing, emergency drills, and the formulation of emergency plans. These activities not only improve their practical application skills but also emphasize responsibility and teamwork, fostering a sense of mutual support and collective effort among students. This integrated approach ensures that students not only develop professional competencies but also embody the spirit of Chinese emergency management, which prioritizes the well-being of the people and the nation(Li and Zhang, 2024).

5. Conclusion

In the context of the "New Liberal Arts," the reform of emergency management courses is not only an inevitable requirement of the times but also a crucial pathway to enhancing students' comprehensive qualities and cultivating innovative talents. By enhancing the practical aspects of courses, deepening industry-education integration, introducing interdisciplinary knowledge, and incorporating ideological and political education, emergency management courses will be better equipped to meet the challenges of the new era and address society's urgent need for high-quality emergency management professionals (Dai et al., 2020).

In the future, emergency management education should continue to explore diverse teaching methods, break down traditional disciplinary boundaries, and integrate modern technology with societal needs. This approach aims to build a more effective and forward-looking curriculum that deeply integrates theory with practice, and professional knowledge with ideological education. By doing so, it will cultivate emergency management professionals who not only possess technical skills but also have a strong sense of social responsibility and humanitarian care, ultimately contributing to social stability and sustainable development.

Acknowledgments

This paper is a phased achievement of the ideological and political construction project of the "Public Policy Analysis" course.

References

- Dai, Y., Zhang, B.Q., Liang, D., Li, Y.P., 2020. Exploration and Reflection on the Teaching of Public Health Emergency Management Courses in Medical Schools Under the COVID-19 Pandemic. Chinese Higher Medical Education, 6,12-13.
- [2] Gu, R.T., 2024. Explo ring the Path of Integrating Ideological and Political Education into Experimental Courses of Emergency Management — Taking the Experiment of Scenario Construction and Deduction of Emergencies as an Example. Public Relations World, 1,19-21.
- [3] Jiang, X.P., Zhang, W.K., 2023. Research on the Construction of the Teaching Quality Evaluation System in Colleges and Universities Under the Concept of New Liberal Arts. University Teaching in China, 10, 75-81.
- [4] Li, W.Y., Zhang, F., 2024. Ideological and Political Teaching Practice of the "Introduction to Emergency Management" Course. Western Quality Education, 13, 57-61.
- [5] Mao, Q., 2022. Reform and Practice of New Business Talent Cultivation in Private Colleges and Universities Under the Background of New Liberal Arts — Taking the International Economy and Trade Major of Xi'an Translation Academy as an Example . Science and Education Guide, 36,15-18.
- [6] Peng, J.W., 2020. Barriers and Breakthrough Paths of Interdisciplinary Education from the Perspective of Discipline Training. Journal of the National Academy of Education Administration, 03, 50-57.
- [7] Zhang, M.M., 2021. Teaching Reform of the "Integrated Business English" Course Under the Background of Cross-Disciplinary Integration in the New Liberal Arts. Modern English, 20,81-83.