The Logic and Practical Path of Resilience-based Emergency Governance in Chinese Universities

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Resilience governance provides a new governance model for emergency management in higher education institutions facing major public crises. Higher education resilience governance, while achieving short-term objectives such as mitigating external impacts and maintaining core functions, enhances the enduring adaptability of higher education institutions to the increasingly changing natural and social environments. This transformation shifts the emergency management mode in higher education from reactive responses to proactive governance. In terms of value logic, resilience governance upholds the mission of higher education as the primary nurturing ground, ensuring fairness, quality, and sustainability in education. In terms of organizational logic, it emphasizes collaborative cooperation among higher education institutions, government, society, and the market, as well as the integration of functions within higher education institutions and relatively close connections among their personnel. In terms of institutional logic, it relies on both top-down institutional supply and bottom-up institutional demand to support effective participation, resulting in authoritative and complementary behavioral rules. In terms of action logic, it combines vertical coordination mechanisms and horizontal community collaboration to enhance the effectiveness of cooperative governance. Therefore, the highest value should be placed on the safety of faculty and students, and education planning should be imbued with resilience. It starts with organizational adaptability to develop resilient institutions, focuses on orderly transitions to enhance the emergency management system in higher education, and centers on proactivity and collaboration to build a community of action for emergency governance in higher education.

Keywords: resilience governance, higher education, emergency governance, China

Introduction

Since the beginning of 2020, the global COVID-19 pandemic has had a severe impact on the socio-economic aspects of human life and has significantly affected the development of higher education institutions and their regular educational activities. This pandemic has posed a significant challenge to China's long-standing emergency governance system for higher education. It has revealed the advantages of China's emergency governance system in higher education while also highlighting the existing shortcomings that need to be addressed (Jin, 2020). At the same time, the pandemic has forced us to systematically consider how to expand the content of normal governance in higher education in the context of highly uncertain risks and how to achieve a smooth transition and orderly switch between emergency and normal governance in China.

Under the backdrop of the pandemic, Chinese scholars have focused on emergency management in higher education from different perspectives. Some scholars argue that China has not yet established an educational governance system to respond to public crises and lacks full capabilities for early warning and crisis response (Zhu, 2020). Internal governance in higher education institutions is still in a state of "passive coping" (Bo, 2020), with limited coordination capacity in social governance participation, placing them in a "marginal position" (Bo, 2020). Issues such as passive prevention and response in emergency management, inefficient emergency response actions, and weak post-recovery capabilities persist (Gao, Tao, & Xu, 2021). Additionally, there are problems of ambiguity, overlap, and confusion in the emergency management functions between higher education institutions and national administrative agencies, particularly local governments (Qi & Zhang, 2016).

To address these issues, it is necessary to manage the relationships between higher education institutions and the government, higher education institutions and society, and the internal governance structures within higher education. Proactive measures should be taken to address the transformation of education governance models in both normal and emergency states. This includes enhancing crisis response mechanisms within higher education institutions (Zhong & Nan, 2021) and improving the governance capabilities and professional standards of higher education institutions within a risk society (Xu & Yuan, 2021).

Building upon the research viewpoints mentioned above, it is necessary for us to reflect on the COVID-19 prevention and control practices in higher education institutions over the past three years. This reflection is driven by the goal of ensuring that higher education institutions can maintain their organizational functions in normal operation and orderly development when facing significant public crises. It involves exploring and analyzing the logical framework and feasible pathways for enhancing the resilience of higher education governance, improving governance effectiveness, and promoting the high-quality development of education.

Introduction of the Concept of "Resilience Governance" in Higher Education Emergency Management

Characteristics of Higher Education Emergency Management

Higher education institutions, as public organizations with increasing connections to society, share common characteristics with other organizations in terms of governance systems and behaviors in the face of complex crises. However, the unique organizational features and institutional missions of higher education institutions give rise to their distinct characteristics in emergency management.

Characteristic of loose and large-scale organization in higher education. Higher education institutions exhibit characteristics of being loosely coupled, highly independent, and challenging to mobilize in emergency situations. According to the American scholar Weick, universities function as loosely coupled organizations, where the division of disciplines leads to loose relationships between departments. Each part strives to maintain its uniqueness, resulting in certain material or logical separations (Hoy & Miskel, 2007). In comparison to typical hierarchical organizations, universities exhibit a loose coupling based on strong discipline expertise (Hu, 2020). Although loosely coupled organizations demonstrate sensitivity and adaptability in academic activities, during emergencies, the low level of interconnectivity among these loosely coupled and relatively independent elements poses significant challenges in terms of information exchange, coordinated actions, and consensus, especially when multiple stakeholders with various interests are involved. These stakeholders often make decisions based on individual interests, leading to a collective action dilemma. Ultimately, the academic advantage of loosely coupled organizations is significantly impacted.

Challenges of high mobility and heterogeneity in students and faculty. Since the 21st century, emerging risks, large-scale disasters, and cross-border crises have become more frequent, with increasing overlap, resulting in significantly increased uncertainty in emergency management (Zhang, 2022). Higher education faces significant challenges due to the high mobility and heterogeneity of students and faculty members. The periodicity of higher education, driven by the institutional arrangements of academic terms and breaks, leads to distinct differences in resource allocation and management personnel during the transitions between the various academic periods. Additionally, students (including international students) experience significant mobility across different regions and even countries during breaks. Furthermore, many universities cannot provide accommodation for all students, leading to commuting and a concentration of students' movements, presenting high-density internal and external movements in a short period. While community-level pandemic management typically focuses on residents within the community or local area, higher education institutions must manage students and faculty coming from various regions. Moreover, university students collectively study and live, creating concentrated demands for educational and living resources. This results in various public opinion risks in the use of big data and new media, placing significant pressure on emergency management within higher education institutions.

Irreversible core functions. Higher education institutions have irreplaceable core functions, and the growth of students must not be interrupted. They must maintain stability and achieve a smooth transition between normal and extraordinary states. In a knowledge society, universities play a fundamental role in connecting national demands, market needs, and individual interests through academic research (Yan, 2017). Universities have become centers for reconstructing social order and promoting positive development. As places for knowledge production and responding to national and social needs, universities are responsible for nurturing public rationality and promoting public interests during public crises. They actively participate in crisis resolution and provide positive educational guidance and intellectual and technical support. For students, their growth process is continuous and irreversible. Furthermore, crises such as the COVID-19 pandemic itself provide educational opportunities for students to learn crisis management. Therefore, higher education institutions cannot come to a standstill; they must not abandon their core missions. Instead, they must change their emergency management concepts and models to achieve a smooth transition between normal and extraordinary states in education.

Rigidity in the hierarchical organizational structure of higher education. Modern universities exhibit clear hierarchical characteristics, which promote the standardization, institutionalization, and standardization of university management. The construction of a modern governance system has not yet transcended the hierarchical model (Hu, 2020). Hierarchical organizations have outstanding advantages in reducing conflict, rapidly reaching consensus, and improving decision-making efficiency during crisis management. In higher education, the hierarchical system plays an indispensable role. However, in larger universities, the existing relatively rigid hierarchical structure alone cannot effectively coordinate emergency management among the enormous number of stakeholders. The needs, demands, and interests of the massive main stakeholders cannot be effectively balanced. This is especially true when student needs are linked to society and parents, attracting greater social attention and giving rise to more crisis risks. Additionally, difficulties in timely and flexible responses may occur, leading to communication issues between higher and lower levels, information distortion, and information loss. Furthermore, during normal management, administrative logic in functional departments and academic logic in departments coexist, sometimes leading to conflicts, and coordinating among different departments is challenging during emergency situations.

Definition of Resilience and Resilience Governance

The concept of "resilience" is derived from the Latin word "resillo", which means "to bounce back or recover to the original state after being disturbed by external forces". Originating from early 19th-century physics, it specifically referred to the ability or property of an object to withstand external forces and return to its original state. After transitioning from mechanical objects to organic systems, "resilience" became a concept of interest and application in multiple disciplines, including ecology, psychology, sociology, and public administration. The resilience alliance emphasizes three essential characteristics of resilience: the ability to endure a series of changes while maintaining functionality and structure, the capacity for self-organization, and the establishment and promotion of learning and adaptability (Committee on Increasing National Resilience…, 2012).

As modern society faces increasing risks, resilience is emerging as a new perspective in the fields of public crisis management, risk management, and emergency management. Its fundamental connotations can be summarized as follows:

(a) From an endogenous perspective, resilience represents a comprehensive set of abilities such as resilience, recovery, learning, and adaptability displayed by individuals, groups, or organizational systems when confronting external sudden risks.

(b) From the perspective of the source of capabilities, resilience highlights the influence and constraints of social systems and structures on resilience. Resilient systems and structures enable subjects to generate and release corresponding resilience capabilities.

(c) In terms of the results of resilience, it minimizes losses for individuals, groups, or organizational systems and helps achieve a new positive state of multiple equilibriums.

Given the above connotations of "resilience", in the field of governance, from "resilient cities" to "resilient communities" and further to "resilient rural areas", resilience is the direction for modern urban adaptation to complex disasters and uncertain risks (Chen & Li, 2017). It serves as an essential path for enhancing community risk management capabilities (Wang & Lei, 2021), establishing a new framework for optimizing public risk and crisis management in rural areas (Zhang & Tang, 2022). Resilience governance is becoming a practical governance model for addressing public crises and significant social risks. Government and other public sectors aim to enhance their governance resilience by constructing a resilience capability system that encompasses preparedness, perception, action, and learning, or by strengthening the continuity performance in various risk phases. This approach is based on cooperative governance and organizational learning mechanisms, encompassing all types of disasters and the entire process of a novel governance model (Zhu & Liu, 2020). Therefore, resilience governance can be understood from two perspectives:

(a) Embedding the concept of resilience in governance, enhancing organizational crisis response capabilities through resilient organizational structures and institutional designs;

(b) Optimizing the relationship structure and interaction among entities in crisis management, promoting relationship coordination among multiple actors in the governance process, altering rigid regulations, and achieving flexible, agile, and holistic governance with the aim of enhancing governance resilience.

Higher education institutions, characterized by their essential role in talent cultivation, loose yet large-scale organizational systems, and the significant characteristics of high mobility and high population density underscore the importance and uniqueness of conducting emergency management during major crisis events.

Resilience governance, as a new governance model in a risk society, aligns highly with the nature of higher education governance, providing new perspectives for governance in higher education institutions facing public crises.

The Essence of Resilience Governance in Universities

Characteristics of the essence of resilience governance in universities. Based on the analysis of the essence of resilience and considering the unique characteristics of universities, the essence of resilience governance in universities can be defined as the ability of a university community to reduce risk and harm, adapt to environmental changes, restore the order of teaching and research, and achieve sustainable development when facing external major disruptions or crises. In terms of time, the governance of resilience in universities is a series of capabilities that accompany the crisis management process. In terms of space, universities need to maintain their ability to operate their core functions (Haase, 2010) while also having the ability to mitigate external impacts and engage in two-way adjustment with other stakeholders. Therefore, we can see that resilience governance in universities emphasizes that universities should maintain their educational functions when faced with disruptions. This involves maintaining strong capabilities for learning and reflection, as well as innovative governance capabilities, which are important components of university governance.

In the post-pandemic era, characterized by the overlapping of social risks and increased uncertainty, introducing the concept of "resilient governance" in the context of public management is crucial. Some scholars propose the concept of "university community resilience" (Rong & Lai, 2022) to withstand significant risks and shocks, and improve the modernization of public safety governance systems and governance capabilities in higher education. Furthermore, researchers have applied resilience theory to analyze issues in the development of vocational education teacher teams that face challenges and disruptions (Sun, 2022). Both the research on the subject of higher education governance resilience and research on specific governance topics indicate that resilience governance has received attention in the field of higher education governance, providing new theoretical and practical perspectives for expanding higher education governance.

The higher education governance system includes internal governance and external governance (Hu, 2022). When universities face sudden major natural disasters or social crises, they must make rapid and appropriate adjustments based on their existing governance systems and structures to adapt to new circumstances. They must also innovate and engage in reflective learning during the crisis, resulting in the formation of a structure and institutional framework that can sustain development in the new normal. This form of public crisis governance, with universities as the main actors, not only focuses on adjusting internal structural relationships in times of crisis and responding collectively as a "community" to major disruptions and impacts but also emphasizes collaborative interactions between universities and stakeholders such as the government, communities, and businesses (Rong & Lai, 2022). This approach allows for bi-directional adaptation and adjustment between universities and the external environment, ultimately achieving an active balance between the social subsystem and universities. Therefore, the goal of resilient governance in higher education is to enhance the ability of universities to respond to risks and ensure their sustainable development in the new normal. Resilient governance in higher education has the following characteristics:

First, it starts from responding to sudden crises. Sudden crises have a significant impact on the normal operation of universities, and conventional governance channels and solutions are ineffective. It is necessary to precisely assess risks, make clear judgments about trends, and make resolute decisions to mitigate crises with the

least cost in the shortest possible time to prevent the crisis from further escalation (Pan & Li, 2019). Therefore, the existence of a major crisis scenario is a prerequisite for resilient governance in universities.

Second, universities' communities engage in multi-dimensional collaborative governance with other stakeholders. On one hand, universities accept shocks in the form of a "community" and respond to risk challenges collectively with a unified overall approach. Various governance bodies within universities should work in unison, and different governance levels should move in the same direction, forming an organic unity with an appropriate structural density (Jiang & Li, 2022). On the other hand, universities must collaborate with stakeholders such as the government, communities, and businesses.

Third, the focus is on enhancing resilience. Through resilient governance, universities develop resilience, adaptability, recovery, and learning abilities in the process of responding to risk crises, providing strong internal support for the sustainable development of universities in the uncertain new normal.

Fourth, the core driving force for resilient governance is the crisis learning mechanism of universities (Zhu, 2020). Universities conduct organizational learning during and after a crisis, systematically reflecting on their experiences and lessons, optimizing and adjusting their existing organizational systems, structures, and policies.

From this perspective, using "resilient governance" as a governance approach for managing major sudden risks and crises in universities not only accomplishes short-term goals such as mitigating external shocks and maintaining core functions but also enhances the enduring capacity of universities to respond to the increasingly dynamic natural and social environments. This transformation reflects a shift in the approach to emergency management in universities from a passive response to an active governance mindset.

The differences between resilient governance in higher education and traditional higher education emergency management. There are significant differences between resilient governance in higher education and traditional higher education emergency management:

Governance philosophy. In terms of governance philosophy, traditional emergency management primarily focuses on passive responses, while resilient governance emphasizes proactive adaptation and coexistence with risks and crises as part of the daily routine.

Governance actors. Traditional higher education emergency management is primarily government-driven, with universities following a single model. In contrast, resilient governance involves collaborative cooperation among multiple stakeholders in an open social system, including universities, government, the market, and civil society. Furthermore, universities have a higher degree of autonomy in resilient governance, implementing tailored strategies suited to their specific situations. The proactivity and collaborative efforts of students, staff, and faculty within universities are crucial factors for successful governance.

Governance logic. Resilient governance breaks away from the one-dimensional thinking found in traditional emergency management, which relies on closed, internal university structures and mechanical control methods for crisis resolution. Instead, it embraces the action strategy of full interaction between government, universities, departments, faculty, and students, as well as mutual adaptation with social systems.

Focus on endogeneity. Traditional higher education emergency management emphasizes the ability to act when crisis risks arise. In contrast, resilient governance places a greater focus on the potential inherent in regular governance processes (Zhang, 2017). It incorporates education and non-educational risk governance matters into the framework of daily governance. This approach enables the orderly transition and integration of governance methods under different risk scenarios.

Table 1

Differences Between Resilient Governance in Higher Education and Traditional Emergency Management

Theme	Emergency management	Resilient governance
Governance purpose	Crisis elimination	Coexistence and adaptation with crises
Governance actors	Government-led with university execution	Collaboration of government, universities, businesses, etc., with more university autonomy
Governance logic	Hierarchical control, passive response, one-way mechanical control, passive reaction	Two-way adaptation and interaction
Governance emphasis	Crisis management capability	Endogenous capacity, orderly transition and integration

The Logic of University Emergency Governance Based on Resilient Governance

University governance is the comprehensive system of governance structures, governance rules, and governance practices that universities use to achieve their own goals and missions (Li, 2018). Resilient governance, as an essential component of university governance in a risk environment, can be constructed based on a framework of values, structure, institutions, and actions. It's important to clarify that the resilient governance system in universities is not an entirely separate system external to the existing university governance system. Instead, it represents an extension of the existing governance system's content. By making necessary reforms and adjustments to the elements and functions of the governance system, universities enhance their governance resilience when facing major crises. This is also an inherent requirement for "good university governance" (Li, 2019).

Value Logic

Governance values guide the actions of universities in both normal and non-normal circumstances. They are the prerequisite and foundation for ensuring that the core functions and values of universities are realized. Faced with complex, highly variable, and highly uncertain changes in the internal and external environment, universities can maintain their mission as the main venue for education and exhibit a high degree of stability in their structure and functions. The current societal risks, with their characteristics of uncertainty, complexity, and unpredictability, are compounded by the application of new technologies such as the Internet and big data. This places university governance under numerous uncertain factors (Huang, 2022). At the same time, the fragmented and rigid models of university governance have made universities exhibit a clear "fragility" when dealing with risks. Resilient university governance, as a comprehensive form of governance, emphasizes putting the interests of teachers and students first, responding promptly to the needs of teachers and students during crisis disruptions, and employing multi-stakeholder collaboration as a governance mechanism. The goal is to achieve a balance between "prioritizing education and ensuring health and safety, balancing educational continuity and flexibility, meeting educational needs with the capacity of the institution, and reconciling curriculum time constraints with innovative teaching methods" (OECD, 2020). In doing so, universities can effectively address crises that disrupt education, restore educational order from disorder, and reduce students' learning losses. Therefore, the purpose of resilient governance is to ensure fairness, quality, and sustainability in education under risk and crisis conditions. This is fundamentally consistent with the essence of modern university governance and serves as an important dimension and systematic guarantee for the high-quality development of higher education.

Organizational Logic

In the face of major public crises, the organizational logic of resilient university governance emphasizes the collaborative efforts of universities with government, society, the market, and other stakeholders, as well as the

integration of functions within university departments and relatively close connections among personnel. For instance, the outbreak of a pandemic disrupted the complex relationships and foundations between universities and various stakeholder groups, governments, and society. It resulted in transformations of the internal and external governance structures of universities and the international governance landscape (Zhong & Nan, 2021). Through the reconstruction of stakeholder relationships and collaborative governance of multiple governance bodies, both formal and informal organizational structures have been embedded in the "loose university organizational system". This has allowed universities, governments, society, businesses, and others to establish relationships of mutual trust, close cooperation, and interdependence, creating an adaptive resilient governance framework. This framework helps control the spread of risks and enhances crisis management capabilities.

Therefore, the organization based on resilient governance places a strong emphasis on the relationship structure between various relevant stakeholders, as well as the construction of actor networks and their interactive systems (Tou, 2022). As a whole, universities, along with their various stakeholders, continually adapt their roles and reshape their relationships to meet the situational requirements of different crisis stages while bearing the risks and damages.

On one hand, universities establish resilient governance structures through cooperation and interactions with the government, society, and the market. With universities' increased dependence on external stakeholders and their growing societal impact, when a major crisis occurs that requires fluid responses, universities must depart from the traditional, government-centric emergency management model. They need to collaborate with the government, businesses, and societal organizations based on existing resource conditions, faculty and student needs, and academic progress. This collaboration helps universities gain support from parents and various societal sectors, fostering a multi-stakeholder governance pattern that breaks away from the linear risk management model of "government and universities".

On the other hand, within universities, a network of embedded governance forms among various stakeholders and departments. This network cleverly integrates organizational structures for emergency situations into the existing university governance system (Gao et al., 2021). It ensures a smooth transition and orderly connection from normal operations to crisis management. The dual nature of universities as both bureaucratic organizations and professional organizations necessitates the full mobilization of all stakeholders' proactiveness and creativity when facing a crisis. This involves breaking and transcending the existing structural characteristics, delegating authority through collaboration, enabling the sharing of information and resources among faculty and students, and facilitating rapid crisis detection and real-time responses. The goal is to make risks knowable and manageable, and to enhance effective collaboration and cohesion among different stakeholders.

The two-tier governance model within universities, combining the administrative hierarchy and the professional academic structure, mandates the transformation from a matrix organizational system to a network structure during crises. This transition reduces the layers of linear information feedback and facilitates point-to-point and person-to-person communication, placing every faculty member, student, and staff member at nodes within the governance network. This transformation allows for the complementary dynamics of multi-center governance and collaborative governance. Multi-center governance enhances the timeliness and flexibility of emergency management, while leadership through the academic hierarchy promotes the effective implementation of emergency management measures. Effective collaboration among multiple stakeholders under the university's centralized leadership improves crisis management efficiency.

Institutional Logic

Institutional norms specify the action rules for all entities within the university in response to a crisis, recovery, and sustainable development, ensuring that the university can make rapid decisions and gather various resources when facing significant crisis risks. In the process of resilient governance, top-down institutional supply and bottom-up institutional demand become the supporting forces for effective participation by the entities, forming authoritative and complementary behavioral rules to achieve order in action (Wang & Lei, 2021).

On the one hand, government requirements for crisis management at universities and the institutional norms set by university-level institutions for colleges are the basis for the stability of resilient governance at universities. Through a technology-dependent risk warning mechanism and a unified information sharing mechanism, effective campus mobilization and collective action are achieved, enabling the university community to coalesce and stabilize during a crisis.

On the other hand, the needs of students and faculty for their learning and living requirements and emotional risks place demands on university administrators, leading to continuous adjustments and improvements in existing institutional arrangements. This can even lead to the establishment of new behavioral norms that adapt to the evolving crisis characteristics. At the same time, students and faculty respond to top-down institutional control with a bottom-up reaction, forming informal behavioral norms that effectively complement the existing institutions. In the generation and transformation of formal and informal institutions, universities achieve the efficiency of resilient governance.

From a dynamic perspective, the institutional system of resilient governance at universities exhibits different characteristics at different stages. Depending on the latent outbreak, spread, and proliferation, easing recovery, and the risk patterns in the post-crisis period (Zhang, 2020), the institutional aspect of resilient governance at universities undergoes the following changes:

In the latent outbreak stage, it requires government leadership to quickly and decisively initiate unconventional institutional measures to transition from normal governance to abnormal governance. For example, this may involve closing campuses, cutting off interpersonal communication, and providing various online platforms and information technology for teaching and research to ensure the continuity of public services.

Upon entering the crisis spread stage, universities establish a collaborative mechanism with the government and other social organizations. This is achieved by constructing multi-stakeholder interactive cooperation mechanisms to address issues such as "how to reopen", "how to coordinate the use of university manpower, financial resources, space, and information resources", "delegation of authority", and clarifying the rights and responsibilities of colleges, functional departments, and mass organizations of students and faculty to achieve equilibrium in the internal institutional adjustment of governance systems.

During the recovery phase, universities initiate proactive risk recovery, rebuild trust systems on campuses, address institutional shortcomings, and implement compensation for students' learning losses to quickly return to normalcy in terms of the order of faculty and student campus life. This prepares for the smooth transition from unconventional governance to normal governance.

In the regular phase, government and university governance entities reflect on crises that have already ended or are about to end through learning and comprehensive assessment. They adjust strategies or tactics based on the crisis situation (Zhang & Zheng, 2022), use lessons learned to prepare for future crisis responses, rethink the purpose, content, and methods of education and learning, as well as the role of the university (Liu, Yang, & Fang,

2021). At the same time, they strengthen the institutional connection between regular management and crisis management, improve the emergency planning system, and provide a stable institutional environment for the risk governance structure.

Action Logic

Crisis management at universities is an essential component of overall societal crisis management. Various internal and external actors within the university take value goals as their guiding principles and engage in role definition, interactive communication, and actions under institutional norms. This process enhances the resilience governance capacity and is the key to achieving effective governance.

First, the formation of a value consensus within the university community during the crisis management process is a prerequisite and foundation for acting. Actors such as government, educational institutions, teachers, students, and parents take action in crisis situations based on their own values, knowledge structures, cognitive abilities, and more. To mitigate potential inconsistencies between collective actions and organizational objectives arising from subjective judgments of actors, information sharing and interactive communication among various entities are necessary to establish a value consensus. The values of the actors involved in university crisis management include prioritizing the health and safety of teachers and students at the political level, ensuring effective collaboration between departments within the university, pursuing equitable and non-discriminatory use of emergency resources, satisfying life needs, and demonstrating public spirit and social responsibility at the social value level. To align different value orientations and gain deep acceptance from all entities, grassroots party organizations within the university should leverage their strong mobilization mechanisms to ensure the formation of a value consensus within the complex network of action entities.

Second, trust relationships based on consensus are established among different action entities. During the crisis outbreak and spread stages, it is difficult to know the severity of risks, the future direction, and response strategies for university functional departments, colleges, and individual faculty and students. External events can further exacerbate derivative crises. In resilient organizations, all action entities have a platform and channels for participating in crisis management. They can promptly access various information resources and, based on a consensus, develop an understanding of government failures, university regulations, active engagement by faculty and students, an open information system, and advocacy for social participation (L. Wang & Q. Y. Wang, 2020), all of which lead to strong trust relationships among entities. This also enables entities to take initiative in recovery, and conduct regular risk awareness, risk prevention, and resilience building, providing a foundation for the future.

Third, the capacity for collaborative cooperation among various action entities is enhanced. Resilient organizational network governance ensures that universities can quickly return to their original states in the event of a crisis or risk and remain vigilant during the phase of regular governance. It shows strong adaptive capacity and crisis learning ability. The achievement of these capabilities is based on collaborative cooperation among various entities. On the one hand, entities align themselves with the university's hierarchical structure to clarify the responsibilities and boundaries of authority during crisis scenarios. They establish information channels and facilitate guidance and monitoring from higher authorities to lower entities. The actions of university and departmental entities align with the emergency governance strategy at the national and local government levels. On the other hand, active participation from faculty, students, and community organizations plays an essential role. They actively engage in lateral interactions, and university-based volunteers, external corporate donations,

class groups, research teams, and more are embedded within the organizational structure. Their initiative is fully utilized, forming an "organic solidarity". The combination of top-down vertical scientific coordination mechanisms and horizontal community collaboration mechanisms contributes to the enhancement of action entities' cooperation and governance effectiveness.

The Emergency Governance Path of Universities Based on the Resilience Governance

With the increasing modern risks and the frequent occurrence of public crises, the environment in which universities operate is becoming increasingly complex. "Enhancing the resilience of the education system and improving its emergency response capabilities has become an important topic in global education governance in the post-pandemic era". However, the implementation of resilient governance in universities faces some obvious practical challenges, such as the limited initiative and creativity of universities as governance entities, and the persistence of the concept of passive waiting for a response; the inefficiency of the top-down hierarchical structure and the lack of coordination among internal university departments and faculty and students; the lack of coordination among different risk response entities, the failure to form a resilient governance community, and the weak crisis learning capabilities of universities. Therefore, we need to recognize the importance and urgency of resilient governance in universities, starting from the top-level design of education, enhancing the resilience of organizational structures, institutional systems, and action capabilities, to improve the effectiveness of emergency governance in universities.

1. Start with a resilient education plan that prioritizes the safety of faculty and students. UNESCO's "Crisis-Sensitive Education Planning" and other documents propose to "incorporate measures to reduce conflict and disaster risk into the mainstream strategies of national education departments". In government education development planning, it is important to explicitly emphasize the importance of enhancing the resilience of the university system. On the basis of the existing emergency plan, governments provide flexible support for crisis response in policies and resources, and include learning reflection as an important link in the crisis process, with timely monitoring of its effectiveness.

2. Start with organizational adaptability to build a resilient organization. Based on the high incidence and complexity of risk, universities need to shift their thinking from completely eliminating crises in the past to coexisting with crises and focus on resilient construction in terms of organizational functions and structures. Universities should make crisis management an important part of daily management and a top priority, adjusting the functional scope and responsibilities of various organizations within the university and other organizations according to the crisis situation to adapt to changes in the internal and external environment. In terms of organizational structure, the government should grant universities more autonomy, fully stimulate the initiative of universities to conduct emergency management, while giving universities more autonomy in terms of independent emergency management, and improve decision-making and resource allocation in a timely and flexible manner by passing the appropriate information channels.

3. The key point is to achieve orderly transformation and improve the university's emergency institutional system. Achieving a smooth transition from crisis management to normal management, ensuring the smooth transition of the education and teaching order, is not only the process of crisis recovery, but also the process of forming a normalized, deep crisis learning mechanism and a process to compensate for student learning losses and restart a new stage. Universities should focus on this key point and improve the governance system. The resilience of normative institutions meets the support and protection of subject actions in different situations.

4. The core is to enhance initiative and coordination to build a university emergency governance action community. With the full participation of universities, faculty and students, social organizations, educational Internet companies, and other entities, it is possible to provide multiple governance possibilities for universities. However, the effect of governance depends on whether a community of action with a sense of public spirit and a sense of community can be formed. We need to be guided by public interests, cultivate a sense of public spirit among faculty and students, mobilize their enthusiasm and initiative to participate in governance, and establish and improve the incentive and supervision mechanisms for multiple entities to jointly govern. It will enable deep connections and mutual dependence among universities and relevant entities from the perspective of intrinsic links, and realize the improvement of information communication platforms, the adjustment and sharing of resources and physical space, and the creation of emergency governance communities with value consensus, role and function complementarity, and orderly coordination.

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