



Reshaping the Resilience in Higher Education Based on Lower-Grade Undergraduate Students' Performance in Literature Course During Covid-19

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Abstract. The current Covid-19 pandemic is still evolving, and as things continue to change in the field of higher education. The design, delivery and reshape of the curriculum during the unprecedented times will be a new normal. In the paper, results of the questionnaire concerned about students' perspectives on lower-grade literature courses, which is an exploratory study with an aim to integrate the resilience of higher education into specific courses. Drawing on the practice of lower-grade literature courses, this study discusses the rapid transition from traditional teaching methods to the blended teaching-learning approach, in relation to the recognition, benefits, challenges, pedagogies, feedback and assessment of literature course in lower-grade. This study concludes by means of highlighting some key results and considerations to explain the resilient capacity and adaptative process to the blended learning-teaching approach in the context of uncertain period. It also proposes if resilience might be accepted and implemented, the blended teaching and learning approach in the literature curriculum would be effective and sustainable among lower-grade English majors in China's universities and colleges.

Keywords: resilience · lower-grade literature courses · the Covid-19 · blended teaching-learning

1 Introduction

Since 2020, the Covid-19 pandemic has been a global challenge across many sectors, including universities, colleges, and other educational institutions. Many higher education institutions decided to adopt and adapt to internet-based distance learning formats in the period of uncertainty, and subsequent lockdowns led to by the Covid-19 has become critical impacts on higher education, especially on traditional face-to-face instruction. Many universities around the world have experienced unprecedented move from on-campus to various formats of online and distance learning during the Covid-19 outbreak. Since then, an accelerated transition to blended teaching-learning approach, such as digital, internet-based, multimodal learning formats, in many countries have been regarded

as an emergent trend that promotes learning resilience and blended teaching-learning transactions. It is important to note that online learning and blended teaching-learning approach have been adopted in literature courses, and challenges and educational value of distance learning have also been debated. Therefore, it is necessary to explore and propose key recommendations to improve the quality of distance and blended learning during the time of pandemic crisis. The scope of the study is limited to science and engineering universities in China and there are two main purposes of this study followed below.

Firstly, the study explores the proliferation of online and distance teaching and learning in English majors' literature courses. Secondly, the study discusses the dynamics of learning resilience and knowledge sharing and proposes the assessment and feedback for a new normal of academic courses in the post-Covid-19 higher education, focusing on the case of lower-grade undergraduates' performance in science and engineering universities in China.

Following a concise literature review on resilience and blended teaching-learning approach, this study first presents challenges and impacts of the Covid-19 on academic courses in China's universities, and then moves to discuss conceptual framework, highlights the research methodology, data collection and data used in the study. This study presents the results and discussion in the following, and the limitations and future research directions of the study will be discussed in the concluding part.

2 Conceptual Framework

The conceptual framework of this study applies the concept of resilience to discuss emergent transition and changes in higher education in a pandemic and post-pandemic world. Resilience during the Covid-19 has involved many opportunities and challenges, which has also triggered some new teaching-learning approaches and technology integration in teaching and learning, such as, internet-based learning, zoom learning format, flipping classroom, Mooc, etc. Studies on the direct impact of pandemic have highlighted physical and psychological depression caused by campus lockdown, weakness of online teaching-learning infrastructure, lack of conducive environment for students' learning, and limited face-to-face teaching-learning interaction. Paudel [1] investigates teachers and learners' perspectives on online education during and after pandemic crisis in higher education and suggests blended teaching-learning as a better alternative means. Rónay and Niemczyk [2] explore the impact of Covid-19 pandemic on academic performance and academic freedom. The findings study that the academic freedom has been threatened by government policies, funding agencies, censorship of scientists and universities themselves, so it is necessary to recognize the urgency to monitor academic freedom globally as the online teaching and intensified use of technology maximized.

This study aims to contribute to the lower-grade students' performance in higher education in the context of pandemic from the perspective of resilience. Several disciplines and fields of research, including psychology, child development, biology, socio-ecological system, mental health theory and social work have studied a reliance approach. According to different scholars [3], as the process of patterned adjustments, resilience adopted by a society or an individual in the face of endogenous and exogenous shocks;

the evolution of the research of resilience originates from the 1800s to the present in the field of physiology and psychology, according to Tusaie and Dyer [4], the early studies of resilience focused upon factors or characteristics that assist individuals to thrive from adversity, and individual and environmental factors may be necessary and sufficient to understand the construct of resilience. It is important to explore resilience from a dynamic, interactive, and holistic perspective. Luthar et al. [5] focuses on understanding resilience, as the positive end of the distribution of developmental outcomes, affecting at-risk individuals. Other studies [6, 7] on resilience has emphasized the capacity to absorb shocks, bounce back and still maintain function, in addition, resilience concerns about the capacity for renewal, re-organization and development. From social-ecological perspective, adaptive capacity, transformability, learning, and innovation are suggested by Folke [8], in this sense, resilience is an approach, a way of thinking, that presents a perspective for guiding and organizing thought, all of which is concerned with how to persist through continuous development in the face of change and disturbance in an informed manner.

The Covid-19 pandemic has been regarded as a global crisis, a major worldwide disturbance, and an unprecedented evolution, in this context, resilience is defined as the capacity of an individual, an institution, a community and even a country to withstand, adapt to, bounce back, and recover from external problems and risks. Resilience is also perceived as a new organizing approach to prevent unacceptable levels of human sufferings and reducing the costs of global emergency response, which internalizes the very pandemic within the country and stresses the adaptability of the individual.

Folke [8] takes characteristics, focus, context into central aspects of social-ecological resilience, which “can be used to investigate organizational resilience in the context of the Covid-19 pandemic in a temporal perspective” [9] (p. 4). Organizational resilience can be defined as the transformation of the negatives into opportunities by going beyond protecting an organization’s current situation in the face of negative situations [10] (p.330). Organizational resilience is influenced by many factors, such as material resources, knowledge management, organizational culture, social networks, etc. Gültkin and Argon highlight that it is important for educational organizations to become resilient, which means resilience of educational organizations depends on the organizational sustainability to cope with difficulties and to survive in a continuous way. They suggest that organizational resilience will provide higher education institutions with a dynamic sustainable structure.

It is important to take into account the fact that higher education institutions demand new requirements and needs due to the Covid-19 pandemic, which has been regarded as one of the biggest challenges, requiring some adaptability and sustainability to deal with the unknown in the current society. Bento et al. [9] focus on the adaptation processes and apply the conception of resilience to explain how the university self-organized during the pandemic. In this research, the authors summarize that beyond the choice and adaptation of technological tools, resilience characterized by an interplay of previous experience and emerging new knowledge has been required.

Resilience has been introduced as an adaptative capacity to rearrange structures in response to impact of Covid-19 pandemic, in addition, “the use of suitable and relevant

pedagogy for online education may depend on the expertise and exposure to information and communications technology for both educators and the learners” [11] (p. 135). According to Peimani and Kamalipour [12], forms of blended teaching and learning are already underway to at once harness the capacities of both online and face-to-face teaching and hopefully manage the limitations of both when it comes to learning. The authors point out that one of the most important challenges involved with blended learning delivery is concerned with communication, including teacher-to-student communication, student-to-student communication, and breakout group learning. With the wave of the Covid-19 pandemic, blended learning has been seen as a sort of technology integration in teaching and learning [13], in the exercise of teaching, blended learning is possibly composed of internet-mediated and face-to-face teaching with constructive and interactive pedagogy, especially with “collaborative knowledge construction” [14–16].

3 Research Methodology

The purpose of this study is to explore the influencing factors of resilience, to explore the perception and recognition of the lower-grade literature courses, and ultimately their desire and ability to promote the higher education during and after the pandemic. To understand how the resilient and adaptative capacity reconcile the teaching practices, taking British-American literature courses as example. A qualitative design and case study are the most fitting approach for this study. More importantly, in the study of results on influencing factors of resilience, SPSS is also applied in this study to perform the thematic analysis in this study.

The present case study is involved with a design of questionnaire items, which were completed during the off-class time with little effort and time to complete them. Results presented in this study are conducted in some universities of science and technology in China during December 2022. The respondents are limited to freshmen and sophomores, without differentiating their gender, in the department of foreign languages and cultures, who will attend a British-American literature courses held in the third year. Literature courses for English majors in colleges and universities have play a key and positive role in improving students’ literary appreciation ability, cultivating students’ language ability and humanistic quality. The new National (China’s) College English Teaching Syllabus for English Majors in 2000 put forward the requirements of cultivating the English majors with mixed abilities, which bring about some challenges for British-American literature courses, that is, applied professional courses such as law, international trade have been added to the original linguistics, literature, and culture courses. So, the total class hours of literature courses are shortened which directly lead to the change of teaching content. In this context, the questionnaire aims to investigate students’ perspectives on benefits and challenges in teaching and learning British-American literature courses in lower grade during and even after the Covid-19 pandemic. Moreover, the questionnaire intends to get suggestions on feasibility of offering British-American literature courses in lower grade. For achieving the objectives, the questionnaire inquiry was employed online due to the pandemic, which is composed of a set of objective questions on a particular issue, and then the primary data were collected by the online questionnaire, the second data were mainly collected from previous studies.

Eleven main questions were raised that are made on the four parameters in terms of the questionnaire: participants' basic information, participants' perspectives on the benefits of lower-grade literature courses, participants' faced challenges in lower-grade literature courses, participants' perspectives on pedagogy of literature courses, participants' qualities required in lower-grade literature courses. There are 593 responses collected, among them there are 409 freshmen and 184 sophomores majoring in English from the universities of science and technology. The data are analyzed by means of simple statistical tool and the results and discussion will be interpreted in the following section. The author conducted the first questionnaire survey online, on this basis, the first questionnaire was revised.

4 Results

The questionnaire result is addressed in the context of a kind of brand-new educational outlook, ideological and political education integrated throughout curriculum, and a convenience sample was used for the purpose of the current study. The analysis and interpretation are made based on the parameters mentioned above.

Firstly, the data analysis (see Table 1) is on participants' perspectives on the recognition and benefits of British-American literature courses.

Table 1 presents participants responses to recognition and benefits of lower-grade literature courses. Table 1 demonstrates that lower-grade literature courses are believed to be accepted by most participants as reported by 27.49% of the agreement and 39.8% of complete agreement. In the meantime, 83.31% of the participants expressed that British-American literature courses set up in the first or second grade will be beneficial to improve language skills, and it will also be helpful to cultivate literary interest (79.6%). Furthermore, the data exhibits that it is important for participants (78.75%) to accumulate

Table 1. Perspectives on the recognition and benefits of literature courses (designed by the author).

Perspectives on the recognition of literature courses	complete disagreement	disagreement	uncertainty	agreement	complete agreement		
	30	14	150	163	236		
	5.06%	2.36%	25.3%	27.49%	39.8%		
Perspectives on the benefits of literature courses	contribution to language skills	contribution to literary interest	enthusiasm for learning	contribution to accumulation of vocabulary and background knowledge	contribution to ability of English appreciation	abundant extracurricular time	preparation for post-graduate entrance exams
	494	472	348	467	429	204	325
	83.31%	79.6%	58.68%	78.75%	72.34%	34.4%	54.81%

Table 2. Participants' faced challenges in lower-grade literature courses (designed by the author).

Faced challenges in lower-grade literature courses	lack of vocabulary	long difficult sentences	lack of interest	lack of motivation	lack of basic literature knowledge	lack of efficient learning outcomes
	494	465	260	292	359	242
	83.31%	78.41%	43.84%	49.24%	60.54%	40.81%

Table 3. Perspectives on pedagogy of literature courses (designed by the author).

genres of literature	women's fiction	science fiction	literature awarded Noble Prize	war and disaster fiction	uncertainty
	314	269	267	208	191
	52.95%	45.36%	45.03%	35.08%	32.21%
principles of selected literary works	simple language	abundance of story	classic works	short story	modern and contemporary works
	441	497	357	280	212
	74.37%	83.81%	60.2%	47.22%	35.75%
main contents of literature courses	literature history		appreciation of literary works		literary criticism
	103		419		71
	17.37%		70.66%		11.97%
teaching-learning formats	teacher-center	breakout group	teacher and student learning community	online courses	off-line courses
	197	238	394	161	193
	33.22%	40.13%	66.44%	27.15%	32.55%

the English vocabulary and literary background information, and participants (72.34%) can enhance their ability of appreciation by means of learning the literature courses. Moreover, the results in Table 1 show that lower-grade literature courses do have positive impacts on learning enthusiasm (58.68%), preparing the postgraduate exams in advance (54.81%) and taking advantage of abundant extracurricular time. The results show that most participants found lower-grade literature courses necessary and advantageous.

Table 2 presents the question that is consisted of six alternatives on faced challenges in lower-grade literature courses. The participants were allowed to choose more than

Table 4. Qualities required in lower-grade literature courses (designed by the author).

test mode	semester paper in group together	reading response	re-	closed-book exam	oral exam
	127	349		25	92
	21.42%	58.85%		4.22%	15.51%
number of one - semester literary works	one	two		three	uncertainty
	245	187		63	98
	41.32%	31.53%		10.62%	16.53%
which course can be integrated into literature courses	intensive reading course		writing course		
	445		148		
	75.04%		24.96%		

Table 5. Weight of resilience's influencing factors (designed by the author)

Factor	Mean	Weight (%)
Internal capacity	3.95	20.66%
External uncertainty	3.86	20.19%
Official policy	3.69	19.30%
Sustainable education	3.90	20.40%
Multiple resources	3.72	19.45%
Sum	19.12	100%

one options to point out the possible challenges when they encounter difficulties in literature courses. Lack of vocabulary (83.31%), long and difficult sentences (78.41%), and lack of basic literature knowledge (60.54%) are extreme challenges that most participants encounter in the literature courses. Less than half percentage of the participants think that lack of motivation (49.24%), lack of interest in British-American Literature (43.84%), and lack of direct and efficient learning outcomes (40.81%) are also taken as the challenges in literature courses. The results show that shortage of basic language knowledge and abilities are accelerating challenges in lower-grade literature courses.

With the aim of discussing the pedagogies required for effective lower-grade literature courses from students' perspectives, the participants were allowed to answer the questions with more than one alternative. Table 3 shows participants' response on pedagogy of literature courses. Almost more than half of participants (52.95%) prefer to choose women fictions, and science fiction (45.36%), works awarded Noble Prize (45.03%) and war disaster fiction (35.08%) are also acceptable. Similarly, 83.81% of participants show great interest in literary works with abundant story, and for beginners,

it is easy to read the works in simple language (74.37%), which is also conducive to cultivate the literary interest and reduce learning pressure. 60.2% of the participants hope to read some classic works, short story (47.22%) and modern and contemporary works (35.75%) are optional as well. According to the data in Table 3, only 17.37% and 11.97% of participants think literature history and literary criticism are necessary to prepare for the in-depth study of literature. 70.66% of the participants expressed that the focus of lower-grade literature courses should be on the appreciation of literary works rather than simply on the literary history and theory. In terms of teaching-learning formats, 66.44% of the participants suggest that literature courses should be teacher-student learning community, a combination of the teacher's instruction and the students' discussion. Given the participants have more opportunities to participate in appreciating and analyzing the literary works, breakout group (40.13%) is taken as a consistent option for the lower-grade students. Compared with online courses, the participants prefer to off-line class which can arouse the students' interest and inspiration by means of face-to-face interaction in class.

Table 4 exhibits that 58.85% of the participants reading response paper as the test mode, 21.42% of the participants suggest semester paper completed by the breakout group can be seen as one of the test methods. Only 4.22% of the participants choose the closed-book exam, which is not beneficial to improve the students' language skills and ability of critical thinking. Given the academic pressure, one (41.32%) or two (31.53%) literary work for one semester are better option for participants according to the data in Table 4. British-American literature course is a systemic process of reading and appreciation, which requires students' language skill, ability of critical thinking, knowledge of Chinese and Western cultures should be integrated into the literature courses. 75.04% of the participants suggest that intensive reading course and British-American literature course can be selected to form the core course group.

The research on the influencing factors of resilience in higher education mainly focuses on individual, environment, education, psychology, policy. According to Likert Scale rating system, the questionnaire on the influencing factors of resilience is designed to measure the respondents' perception on which factors will affect the resilience in higher education. The categories of response are coded numerically, typically include "strongly important", "important", "neutral", "unimportant", and "strongly unimportant", where numerical values are defined, such as strongly important = 5, important = 4, neutral = 3, unimportant = 2, strongly unimportant = 1. The total score of the five items is the influencing factor score. There are 500 questionnaires distribute, and 480 were effectively recovered, with the recovery rate of 96%. And then, the validity of the scale on the influencing factors of resilience is examined, among them the KMO value of the influencing factors of resilience is 0.873, the approximate Chi-square of Bartlett's Test of Sphericity is 178.674, the value of degree of freedom (df) is 190, and significance level (sl) is less than 0.1. It proves that factor analysis can be carried out through the sl test, and principal factors can also be extracted. So based on the validity test and factor analysis, there are 5 factors involved in resilience in higher education: internal capacity, external uncertainty official policy, sustainable education, multiple resources (see Table 5).

The weight of 5 factors shows no apparent differences, and the importance in proper order internal capacity (20.66%), sustainable education (20.40%), external uncertainty

(20.19%), multiple resources (19.45%), official policy (19.30%). Resilience is concerned with how to cope with external risks and crisis, maintain, recover, and innovate into more desirable interactions. Specifically, internal capacity identified include cognitive factors and internal competencies; sustainable education is concerned about adaptive capacity, transformality, and teaching practices; external uncertainty is made up of uncertain risks and crisis, as well as perceived social support and external connectedness; multiple resources are mainly from collaboration of education-related agents, and technological resources cannot be neglected; official policy published by the government, official institutions emphasizes the significance of strengthening the resilience of the higher education and improving its emergency response capacity to various risks.

Concerning to the results of the questionnaires, the common advises that majorities of the participants are favor of taking British-American literature courses in lower-grade, and the courses should focus on the actual need, ability, and interest of students. In terms of curriculum arrangement, both quality and quantity should be taken into consideration to avoid too much academic pressure. Most participants express that they prefer to short novels as the starting pointing. Given the pedagogy, the responses exhibit that teacher-student learning community can give full play to students' initiative and creativity in the literature courses which will be advantageous to students' autonomy, independence, and cooperation spirit. From the perspective of higher education, resilience depends on its influencing factors that facilitate the new normal of education. These influencing factors indicate variation in interactions between teacher and student, between student and university, between teacher and university in context of instability. Therefore, flexible, and various teaching-learning formats are favorable. Assessment methods, both subjective and objective, can evaluate students' overall language skill and cultivate their ability of literary critical thinking scientifically, accurately, and comprehensively.

5 Discussion

The overall objective of the present study is to explore the resilience in higher education based on lower-grade undergraduate students' performance in literature course in response to the Covid-19 pandemic. An analysis of the questionnaire presents the students' perspectives on the literature curriculum management and the emergence of resilience in the higher education in China. Based on these data, it seems that the progressive transition and innovation made in the curriculum arrangement will have a possibly positive outcome. In relation to students' perceptions and feedbacks, lower-grade teaching trial and practice involve not only the adoption of blended teaching methods and tools but also a further recognition of the resilience in the higher education. Discussion is hereby presented from the perspective of resilience and blended subjective, methods and technological tools.

With regard to resilience, the recognition and benefits of lower-grade literature courses are examined in terms of self-organizing processes, which is concerned with an effective exercise of teaching change, the new requirements related to the new social context and knowledge. Although physical boundaries during the Covid-19 pandemic, 39.8% of the participants found literature courses in lower-grade beneficial for promoting language skills, accumulating the vocabularies and literature knowledge. What's

more, the pandemic has increased the need of resilience in academic courses, and then blending students' learning experience and alternating online and off-line class. Given the interaction-focused nature of literature course, the emphasis in how to keep the resilience of the very courses during and after the Covid-19 pandemic from a teacher-centered practice toward a learner-centered exercise.

With the rise and popularity of pragmatism in the modern society, the traditional humanities have been marginalized in the field of higher education and been deep in crisis, information and communication technology, the Internet, big data, and other intelligent networking have caused great changes in the way of thinking, lifestyle, production, governance, also in the field of higher education. The new liberal arts have emerged and been promoted that is not a complete subversion and overall negation of the traditional liberal arts, instead, the new liberal arts is an extension of the traditional liberal arts to become an inevitable trend that is the integration of comprehensive inter- and cross-disciplines. Lower-grade literature courses bring some difficulties, including lack of vocabulary, long difficult sentences, and lack of basic literature knowledge, etc. Thus, to develop a sustainable teaching methods and model, the teacher should pay more attention to change of pedagogies in the uncertain environment and period. The Covid-19 outbreak might be taken as an opportunity for the teachers and the students to learn from the rapid changes and adaptations, formats of blended teaching-learning have been optional as the demand for the development and implementation of resilient capacity. One of the significant pedagogies the participants are favorable is teacher-student learning community associated with blended teaching delivery, which has provided the teachers and students with flexibility to read the literary works, to discuss in video conference on the internet. The wide range of diverse technology advancement used by the teachers and the students at large may enhance the interaction among them, which is necessary and important for teacher-student community in class. so, the breakout group and discussion boards are very useful and effective pedagogical tools to foster the interactive learning practice. While online literature courses will be disadvantageous to the effective teacher-to-student and student-to-student communication. Therefore, according to the responses, facilitating interaction might contribute to the flexible feedback and assessment, reader response, the semester paper in group will be the sustainable options. Resilience, especially in the period of the pandemic crisis, has been presented as a common capacity to deal with the potential drawbacks of lower-grade literature courses as well as adapt to the new patterns of teaching-learning practices.

6 Conclusion

Much of the academic debate on the higher education during the Covid-19 pandemic has focused on the opportunities and challenges, benefits and potential drawbacks encountered. However, from the perspective of resilience, it is important to emphasis the resilient and adaptative capacities emerged in the unprecedented environment, and some new patterns of teaching and learning in uncertain academic context. This study places emphasis on higher education fostering the resilient and adaptative capacity, in other words, resilience as an organizational as well as personal resource. In the wake of the pandemic, higher education's purpose should be highlighted as playing an essential role

in helping students cope with their crisis and adapt to the new normal of education by reinforcing the humanity qualities of students. As illustrated in this study, the organizational and technological dynamics are combined in the adaptative capacity process and learning how to respond to the uncertain crisis is important in the process. Drawing on the results of the questionnaire on the students' perspectives on lower-grade literature courses, this study discusses the rapid transition from traditional teaching style to the blended formats and points to the recognition, advantages, and drawbacks in relation to the curriculum arrangement, pedagogies, feedback and assessment. The process of adaptative and resilient approaches have been taken into consideration to contribute to the associated changes of pedagogy and evolution of blended teaching-learning methods.

The discussion in this paper is not simply about evaluating which one is better, instead, the main aim is to focus on the integration of resilience in higher education into the specific courses. The study reveals that the participants' eagerness towards adaptative process of literature courses, and vast majority of participants' perspective on the consequences of applying the blended approach as facilitator of new educational platforms. Additionally, the teachers should take appropriate strategies involving teaching contents, styles, methods, feedback to make blended teaching-learning approach friendly and acceptable so that the resilience in higher education can be redesigned and reshaped as per the needs, levels and interests of the students. The results obtained in the study seem to show that applying blended teaching-learning approach will facilitate the university resilience, which will lead to a new volution of learning methods at the university in the digital period. Covid-19 to some extends can be taken as the trigger for an update the adaptative and resilient capacity of the university, moreover, pedagogy has been given priority to technological methods in the wake of the Covid-19. It seems to conclude that pedagogy during the pandemic was focused on the content, was making learning student-centered, and was short of dialogical possibilities.

In this study, a number of statistically important data are presented, which might interpret some aspects of the resilience in lower-grade literature courses, other aspects like emotional resilience, organizational resilience and academic resilience will be further discussed. In addition, this study only showed the freshmen and sophomores' responses to the design of the literature courses, which does not indicate the juniors and seniors' options in the corresponding courses. The finding of the succeeding research will take the curriculum's outcome and students' performance into consideration. Despite these limitations, this study highlights the idea that resilience has been fostered through education in the period of pandemic crisis, underlines how resilience can be employed to redesign and reshape teaching and learning practices in the period of the Covid-19 pandemic, and to build in more opportunities for the blended nature of the literature courses in lower-grade.

References

1. Paudel, P. Online Education: Benefits, Challenges and Strategies During and After Covid-19 in Higher Education. *International Journal on Studies in Education*, 2021,3,70-85.
2. Rónay, Z.; Niemczyk E, K. A Worldwide Pandemic and Academic Freedom: Challenges of the Changing Landscape. *New Challenges to Education: Lessons from Around the World*, BCES Conference Books, 2021, 19, 10-16.

3. Philippe, B. Resilience, and International Politics: Premises, Debates, Agenda, *International Studies Review*, 2015, 17, 374-395.
4. Tusaie, K.; Dyer, J. Resilience: A Historical Review of the Construct. *Holistic Nursing Practice*, 2004, 18, 3-10.
5. Luthar, S.S. et al. The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work. *Child Development*, 2000, 71, 543-562.
6. Gunderson, L. H.; Holling, C. S. (Eds) *Panarchy: Understanding Transformations in Human and Natural Systems*; Island Press, Washington DC, 2002.
7. Berkes, F. et al. (Eds) *Navigating Social-Ecological Systems: Building Resilience for Complexity and Change*; Cambridge University Press, UK, 2003.
8. Folke, C. Resilience: The Emergence of a Perspective for Social-Ecological Systems Analyses. *Global Environmental Change*, 2006, 16, 253-267.
9. Bento, F. et al. Resilience in Higher Education: A Complex Perspective to Lecturers' Adaptive Processes in Response to the Covid-19 Pandemic. *Education Sciences*, 2021, 11, 492, <https://doi.org/10.3390/educsci11090492>.
10. Gültkin, G. S.; Agron T. Examination of the Relationship between Organizational Resilience and Organizational Sustainability at Higher Education Institution. *International Journal of Curriculum and Instruction*, 2020, 12, 329-343.
11. Pokhrel, S.; Chhetri, R. A Literature Review on Impact of Covid-19 Pandemic on Teaching and Learning. *Higher Education for the Future*, 2021, 8, 133-141.
12. Peimani, N.; Kamalipour, H. Online Education and the Covid-19 Outbreak: A Case Study of Online Teaching during Lockdown. *Education Sciences*, 2021, 11, 72, <https://doi.org/10.3390/educsci11020072>.
13. Amenduni, F.; Ligorio, M. B. Blended Learning and Teaching in Higher Education: An International Perspective. *Education Sciences*, 2022, 12, 129, <https://doi.org/10.3390/educsci12020129>.
14. Ritella, G.; Loperfido, F.F. Students' Self-Organization of the Learning Environment during a Blended Knowledge Creation Course. *Education Sciences*. 2021, 11, 580, <https://doi.org/10.3390/educsci11100580>.
15. Sansone, N. et al. The Designing and Re-Designing of a Blended University Course Based on the Triological Learning Approach. *Education Sciences*. 2021, 11, 591. <https://doi.org/10.3390/educsci11100591>.
16. Soliman, D. et al. Knowledge Building in Online Model: Insights and Reflections. *Education Sciences*. 2021, 11, 425. <https://doi.org/10.3390/educsci11080425>

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