

# The Cultural Contexts Of E-Learning In Higher Education In China: A Study Focused On Student And Teacher Perspectives

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### **Abstract**

With an emphasis on the viewpoints of teachers, this study examined how cultural contexts affect distance learning in colleges and universities in china. The efficiency, execution, and acceptance of online education were examined with a focus on cultural standards. Researchers used a quantitative approach, surveying a huge cross-section of university staff and students in china with pre-designed questionnaires. The linkages and correlations were examined using descriptive statistics. Research showed that cultural contexts significantly affected how people used e-learning platforms. In line with the cultural standards of hierarchy and organised education, learners indicated relying on teacher supervision. There was less room for independence and critical thought because of this dependence, but there was more clarity. The prospective of online education was seen by teachers, but they faced difficulties shifting away from conventional instructor-focused models to collaborative, student-centred ones. The cultural focus on education to progress in society inspired high levels of student participation, and collectivist principles fostered cooperative learning, group assignments, and peer contact despite these obstacles. Differences impacted engagement and accomplishments, as shown by the digital connectivity disparity between rural and urban students. Combining cultural customs with contemporary technological methods was shown to be crucial to the effectiveness of elearning in china, according to the investigation. Encouraging student collaboration, dealing with digital inequities, and offering opportunities for teachers to blend cultural competence with innovative teaching techniques were among the suggestions offered. To produce equitable, productive, and long-lasting educational results, chinese institutions improved their online learning methodologies by integrating cultural contexts.

**Keywords:** e-learning; cultural contexts; teacher perspectives; online education; higher education in china.

#### 1. Introduction

Distant education's cultural implications have substantially impacted how chinese universities have adopted and integrated e-learning platforms. Chinese educational system, with its roots in confucian customs, emphasises deference to authority figures, restrictions, and cooperation. These cultural norms shape the nature of online learning, particularly in relation to studentteacher relationships, class participation, and educational outcomes. Students in online chinese classes often rely more on teacher guidance than their traditional chinese school counterparts since traditional chinese education values student autonomy less highly in the learning process. This might be a roadblock to the widespread implementation of global e-learning methodologies that value independent study, collaborative projects, and critical thinking (alenezi, 2023). While chinese educational organisations have dealt with these issues straightaway, internet learning has additionally opened new opportunities. At the same time as it promotes improvements for learning and widens perspectives, the merging of online resources makes accessible diverse knowledge from around the world. However, schools need to carefully design online classrooms that combine traditional organisational arrangements with innovative, technological-based ways of teaching if they want to keep up with cultural expectations. As an example, students' cultural conventions around modesty and decency could prevent them from participating actively in online discussions; but this can be overcome using well-structured networks and the direct intervention of instructors. Colleges' views on

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education's purpose are also shaped by cultural factors. Educational achievement is often linked to societal and national development in china. Consequently, instead of being seen as simply a practicality, online education is now viewed as a powerful tool for expanding access, improving efficiency, and creating more equal educational possibilities (alfaro et al., 2021). By combining traditional practices with modern computational methods, chinese universities are creating unique blended approaches that demonstrate both cultural coherence and global relevance. In summary, chinese academic establishments engage the cultural components of studying online in their online course approaches, implementation, and assessment to accommodate technological advances while protecting their cultural backgrounds and essential fundamentals of education.

## 2. Background of the study

Although there are clear legislative, social, and financial differences between china and the numerous other places where chinese culture is strong, there are still several core cultural values that every chinese people, regardless of whether they live in china's mainland, taiwan, or hong kong, have in common. The chinese people are incredibly unique because of the culture that they were born into. These guiding principles have endured and are unique because of a common language and a history that goes back four thousand years. Every chinese community has its own unique traditions and customs, but at its core, everything chinese culture is unified. This set of beliefs is unique to china and sets it apart from other eastern traditions as well as the western cultures (like japanese culture) (chen et al., 2020). Conversely, the relationship that develops among educators and their students is vital. Many have pointed out that one of confucianism's most recognisable features is its insistence on students showing respect to their seniors. Initially, in confucian society, students think of their teachers as parents. The traditional chinese model of teacher-student relationships was based on the paternal role of the father as the authority figure, since most teachers in the country were older men than their students. As a result, students are viewed as inferior to their teachers. In the realm of university education in specific, confucian culture exerts a tremendous impact on chinese societies overall. A key principle of confucianism is the importance of learning for the benefit of civilisation; it also emphasises the importance of people's capacity to study and their moral understanding (osadcha et al., 2021). An excellent schooling is one of the most certain ways to climb up the economic chain and amass substantial wealth. Their thoughts on essential themes, such as the importance of effort, the value of good results, and how confident they are in presenting different viewpoints to peers and educators, have been carefully studied.

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## 3. Purpose of the research

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The primary objective of the research study was to investigate, from the viewpoint of chinese university professors, the cultural context of online education in china. Educators' engagement with and adaptation to online teaching techniques were examined in relation to cultural conventions, social norms, and educational objectives. Cultural elements such as collectivism beliefs, examination-focused methods, and authoritarian interactions between educators and students had a significant impact on the development, implementation, and evaluation of online education in china. The study's overarching goal was to provide light on how chinese universities may better design e-learning platforms that are sensitive to local cultures. The study aimed to offer a detailed knowledge of how cultural settings impacted the effectiveness and constraints on e-learning in chinese colleges and universities by concentrating on instructor perspectives. The study's final goal was to provide light on how institutions may improve the standard of instruction, overcome obstacles, and encourage successful digital education through the creation of culturally responsive e-learning systems.

#### 4. Literature review

With the rise of comprehensive educational platforms, a fresh chapter has opened in the history of universities. Ubiquitous educational tools provide constant, effortless accessibility irrespective of location, enhancing contextually aware educational activities. Additionally, they facilitate the provision of tailored possibilities for learning while also facilitating the simple integration with technological and genuine educational assets. Learning institutions can make use of an abundance of readily accessible, pervasive e-learning resources. Many students from a variety of cultural and academic backgrounds can access courses and higher education through e-learning platforms. Online courses may fail to take off in universities if their potential is underappreciated. Earlier in a review of the literature, the potential applications of ubiquitous educational spaces in academic settings have been discussed. On the other hand, it heightened the need for open and relevant studies that may be used to predict subsequent growth procedures (aljawarneh, 2020). In addition, it was demonstrated that e-learning 3.0 is a prominent paradigm utilising web 3.0 capabilities for interactive education. Based on the research, the main concern was that professors and students could not realise these internetbased resources are not under the supervision of their schools. The concepts and confidentiality laws change from nation to nation since these data centres have been set up in several various nations. E-learning in higher education institutions (heis) was the focus of another study that attempted to identify the variables impacting internet of things (iot) uptake (madni et al., 2022). In addition, they offered a model for promoting the use of iot-driven e-learning in emerging economies and proposed suggestions for how to increase the implementation of iot for elearning in heis. The e-learning model built on iot divided these aspects into four separate groups: personal, work-related, natural, and technical. To identify the most important aspects for effective iot-orientated e-learning in higher education institutions, researchers compared and described each influential component in depth. In the framework of the covid-19 pandemic, another study intended to evaluate the efficacy of online education and identify the factors that contribute to its accomplishment (jaoua et al., 2022). According to the study's results, four variables, such as the e-learning framework, e-learning preparedness, connectivity, and reluctance to change, interact to enable successful e-learning. Additionally, e-learning efficacy was severely impacted by reluctance to modify since the amount of involvement have been reduced.

## 5. Research question

• How do cultural contexts of e-learning influence higher education in china considering teacher perspectives?

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## 6. Research methodology

## 6.1 Research design

The quantitative data was analysed by researchers using spss version 25. Researchers calculated the magnitude and trend of mathematical relationships using the odds ratio and 95% confidence interval. A p-value of less than 0.05 was used to determine statistical significance. Statistical methods were employed to guarantee accuracy and reliability in the structured survey questionnaires, while descriptive statistics were employed for the most crucial aspects of the data.

## 6.2 Sampling

Every participant of the specified population had an equal likelihood of being chosen for this study because a simple random sampling method was used. The research needed 753 people to fill out the survey according to the rao-soft software. At random intervals, 1,000 questionnaires were sent digitally to respondents who were eligible for sampling. From a total of 890 responses, 66 were considered unreliable and so weren't allowed to make it into the final analysis. Because they provided legitimate information, 824 respondents were taken into consideration.

#### 6.3 Data and measurement

A structured questionnaire survey was the main tool used to collect data. Two main parts make up the survey: (a) demographic information and (b) a 5-point likert scale for participants to rate the relative value of different online and offline mediums. Secondary data were gathered from credible sources, including official publications and internet web pages, to bolster the main conclusions.

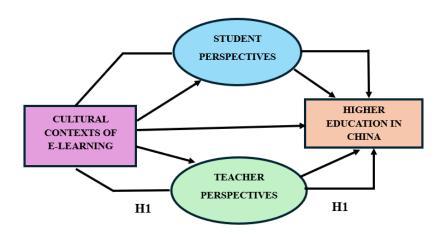
## 6.4 Statistical software

Microsoft excel and spss version 25 were the equipment utilised for data analysis.

#### **6.5 Statistical tools**

To examine the gathered data, a descriptive analysis was employed. For comparing the two groups and ensuring the validity of the evaluation framework, the researchers employed analysis of variance (anova). Researchers also made use of descriptive statistics to better understand the data and spot meaningful patterns and relationships.

## 7. Conceptual framework



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#### 8. Result

## Factor analysis (fa):

Using factor analysis (fa) is one approach to uncovering hidden patterns in information. Examinations sometimes make use of regression values when no clear clinical or graphical indicators are available. Virtual reality is a great tool for discovering security holes, infractions, and possible observable connections. Researchers use the kaiser-meyer-olkin (kmo) test to examine the data that researchers get from several regression investigations. Results using the statistical framework and the variables it used for the sample were valid. The data may reveal the existence of replicas. As the ratios are decreased, the data appears more pronounced. A number between 0 and 1 is given to the investigator by kmo. A kmo rating between 0.8 and 1 is required for a specific instance to be deemed satisfactory.

The following, according to kaiser, are the permitted categories: the standards that kaiser has established for authorisation are as follows:

An appalling 0.050 to 0.059; well below the usual range of 0.60 to 0.69; the typical range for middle grades is between 0.70 and 0.79.

A quality point score between 0.80 and 0.89. The interval from 0.90 to 1.00 astounds them.

Table 1: examination of kmo and bartlett's sampling adequacy

According to the kaiser-meyer-olkin scale: 0.951

The results of bartlett's test of sphericity are as follows:

3768.753 is the approximate chi-square value

190 is degrees of freedom (df)

sig. = 0.000

Table 1: KMO and Bartlett's Test

KMO and Bartlett's Test					
Kaiser-Meyer-Olkin Measure of Sampling Adequacy. 0.951					
Bartlett's Test of Sphericity	Approx. Chi-Square	3768.753			
	df	190			
	Sig.	.000			

In majority of instances, this makes it easy to apply the requirements for selection. If the correlation matrices showed statistical significance, then the researchers determined it using

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bartlett's assessment of sphericity. A sample, which have a kaiser-meyer-olkin score of 0.951, is to be considered sufficiently vast. The p-value of 0.00 has resulted from the bartlett's sphericity test. The correlation matrices are not unique, as confirmed by the positive outcome of bartlett's sphericity test.

## **❖** Independent variable

## • Cultural contexts of e-learning:

Every step of online education, from planning to execution to student feedback, is affected by the cultural context. Cultural, societal, and religious traditions impact how both learners and educators engage with technology and how distance learning courses are structured. Rather than more independent or participative online alternatives, students might become more comfortable with instructor-guided classes in these kinds of environments. Online education is viewed as an opportunity for learners to acquire information at their own speed, actively engage in class interactions, and collaborate on problem-solving in individualised cultures such as some western nations (prasetyo et al., 2021). Some students might appear more at ease contributing to class conversations than others; this could be due to cultural standards like modesty or control. Other cultural factors that influence online education include words people use, social skills, and views on technology. Resources available online might be easier to understand for learners from cultures that are more knowledgeable about technology, whereas those from less technical origins might not know where to start. In the end, cultural factors determine how people will react to online education and whether it will be able to deliver valuable options for learning in different settings (ghosh et al., 2021). The way both teachers and students view, embrace, and participate in online learning is heavily influenced by the cultural settings of e-learning. Professors' and learners' pedagogical stances are influenced by cultural norms on computing power, and teamwork in multicultural classrooms. Understanding these environments is crucial for creating accessible and flexible online educational programmes that meet specific requirements.

## **❖** Mediating variable

## • Teacher perspectives:

Teacher perspectives on e-learning offer insightful information about the benefits and drawbacks of technologically enhanced education. Online education has many proponents among faculty who regard it as an important development for higher education in terms of affordability, creativity, and adaptability. The use of digital resources, increased accessibility to materials, and engaging instructional techniques can all contribute to a more enriching learning environment for students. Professors are also aware of the ways in which e-learning can facilitate worldwide interaction, independent study, and individualised instruction (eksail & afari, 2020). But instructors are worried that students may not be as engaged or motivated because of problems including knowledge of computers, stress, and a loss of personal interaction. Educators already confront a lot of obstacles; technical issues, a lack of organisational assistance, and insufficient training just make things worse. Teachers also emphasise the significance of cultural significance in e-learning material, pointing out that learners' cultural and social contexts have a significant impact on what they learn online. Although e-learning presents prospects for educational reform, teachers agree that adequate instruction, facilities, and assistance networks are crucial for it to be productive (pustika, 2020). To guarantee high-quality education, they emphasise the importance of integrated strategies that integrate digital advancements with traditional ways.

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## **❖** Dependent variable

## • Higher education in china:

China is now an international innovator in research and higher education attributed to its impressive growth and modernisation over the last few years. China has spent a lot of money on its extensive college and university system to make it more viable on the global stage in terms of excellence, facilities, and student outcomes. National initiatives including the "double first-class initiative" seek to foster prestigious schools and exceptional teachers. Numerous chinese universities have seen a consistent increase in their worldwide educational standings because of this (bin et al., 2020). Considering the country's fast financial and social expansion, chinese higher education places an emphasis on both contemporary technical sectors and conventional fields of study. Education and instruction methods are still influenced by cultural values including control, admiration for superiors, and collaborative education. As more foreign learners register in chinese colleges and increasingly chinese graduates' study overseas, internationalisation has emerged as a prominent aspect. Problems persist, though, and they include things like intense educational stress, geographical inequalities, and striking an equilibrium between performance and mass development (chen et al., 2020). In general, china's higher learning system has been seen as an evolving institution that aims to combine tradition and modernity within an international e-learning environment.

# • Relationship between cultural contexts of e-learning and higher education in china considering teacher perspectives:

From the perspective of teachers, the relationship between the cultural contexts of e-learning and higher education in china has been formed by a combination of conventional principles of learning and contemporary technology breakthroughs. Teachers frequently point out how chinese culture, which prioritises admiration for superiors, group learning, and exam-driven success, affects how students interact with online resources. Successful online learning requires free expression, intellectual curiosity, and teamwork, none of which are often possible due to cultural norms (chen et al., 2020). Professors also mention that different students have different degrees of knowledge about technology, different levels of digital competence, and language obstacles, all of which make it difficult to adjust e-learning to meet their specific requirements. Also, they are aware of the ways in which e-learning can help with china's modernisation and international competitiveness efforts by increasing accessibility, providing greater versatility, and encouraging creative pedagogical approaches. Teachers emphasise the significance of incorporating culturally appropriate topics and techniques into educational websites to help students build deeper connections with the curriculum (li et al., 2022). Faculties are of the opinion that e-learning can develop into an influential instrument that supports established methods while encouraging creativity if cultural contexts are taken into consideration.

The subsequent hypotheses about the relationship between cultural contexts of e-learning and higher education in china considering teacher perspectives were developed based on whatever has previously been established at this stage:

- " $h_{01}$ : there is no significant relationship between cultural contexts of e-learning and higher education in china considering teacher perspectives."
- "h<sub>1</sub>: there is a significant relationship between cultural contexts of e-learning and higher education in china considering teacher perspectives."



Table 2: H<sub>1</sub> ANOVA Test

ANOVA							
Sum							
	Sum of Squares	df	Mean Square	F	Sig.		
Between Groups	36,487.840	292	4576.587	825.432	0.000		
Within Groups	320.770	531	7.286				
Total	36,808.61	823					

Important details were uncovered by the examination. Considering the alpha criteria, there is a difference that is statistically significant, as indicated by the f-value of 825.432 and the p-value of 0.000. The findings indicated that the "h<sub>I</sub>: there is a significant relationship between cultural contexts of e-learning and higher education in china considering teacher perspectives" has been accepted, and the null hypothesis has been rejected.

#### 9. Discussion

The results of the current investigation showed that the efficiency of e-learning in chinese higher education was significantly influenced by contexts of culture. Professors recognised that distance education had been influenced by long-running customs such as a collective mindset, reverence for superiors, and testing-focused learning. The cultural standards that are ingrained in the educational system of china limited the efficiency of online learning, even while it opened possibilities for greater accessibility and convenience. As a reflection of cultural norms about hierarchy and organised education, learners stated that they depended significantly on instructor direction. Although it brought some discipline, this dependence inhibited personal initiative and critical thinking in virtual spaces. The transition from traditional instructional techniques to engaging, student-generated ones was also challenging, especially when it came to promoting free discussion and inspiring originality, according to teachers. A cultural contradiction between traditional traditions and the expectations of educational technology was brought to light by these problems. Cultural values also encouraged successful achievements despite these limitations. Throughout digital spaces, the collectivism perspective promoted cooperation, mutual learning, and collaborative endeavours. Students were highly encouraged to get involved in online learning despite the obstacles because of their culture's focus on education to social progress. The efficacy of e-learning was already impacted by internet resources and technological inequality before the gap between rural and urban students became even more glaring. Integrating cultural settings into digital platforms was the key to the effectiveness of e-learning in china, according to the study. College and universities could be made more accessible and efficient if institutions preserved norms while progressively encouraging innovation.

## 10. conclusion.

The acceptance and efficacy of distance learning in Chinese university learning were found to be significantly influenced by contexts of culture, according to the findings of this study.

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Teachers' recognition of how traditional ideals including collectivism, hierarchical relationships between educators and students, and test-based methods influenced online education was understood and implemented. These cultural expectations limited the achievement of e-learning, which increased accessibility, versatility, and creativity. While instructors struggled to adopt more student-focused and participatory pedagogies that encouraged autonomy and analytical thinking, learners looked to their teachers for guidance. Universities should create culturally relevant e-learning platforms that combine conventional methods with technological ones, according to the analysis. Aligning with collectivist principles while boosting engagement can be achieved through collaborative elements including cooperation discussions, collaborative endeavours, and peer counselling. There was an encouragement for institutions and legislators to contribute to the countryside's education and infrastructure to reduce digital inequality. To help teachers strike a balance between cultural competence and innovative education, educator professional growth was also suggested. Research concluded that combining cultural norms with incremental innovation was crucial to china's e-learning prospects. Maintaining cultural consistency while keeping higher education accessible, efficient, and responsive to educational requirements around the world is possible with this strategy.

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