

THE CONSTRUCTION OF DIGITAL ABILITY OF VOCATIONAL COLLEGE STUDENTS IN CHINA

Huang Weifang

Technological University of the Philippines 290263472@qq.com

Jin Ling

Guilin Tourism University 76405530@qq.com

ABSTRACT

Research demonstrates that Covid-19 has been a problem for academic institutions throughout the globe. In China, where there are more than 1,300 vocational colleges and over 11,000 vocational high schools, offline teaching and learning activities have been discontinued and transformed to an online way. To help inform the further development of online vocational education in China and elsewhere, a research was conducted to trace the astonishing change. Based on previous studies of vocational students' technological literacy, it was determined that vocational schools adapted to the epidemic by increasing their emphasis on online education. Moreover, problems and challenges with online learning in practise training and internships, organisational, and technical contexts have been encountered by vocational institutions. A system-driven reform strategy and an online learning approach should be considered and implemented to keep up with the changing needs of vocational education in the digital age. As a result of the current Covid-19 pandemic, the event industry and tertiary education providers in the event management field are revaluating the goals, objectives, and structure of future events. The upcoming emergence of hybrid, virtual, and otherwise novel events call for a rethinking of the structure and content of the relevant courses and programmes. secondary data has been used as methodology and results have been created that there is influence of Covid-19 on the Vocational colleges and there is improvement in the education through technology.

Keywords: Construction, Digital Ability, Vocational College, Ccovid-19, Learning Management, Learning styles, Open Educational Resources (OERs).

INTRODUCTION

The Covid-19 epidemic has had a widespread impact on educational practises, including both teaching and learning. This issue has been tackled head-on by groups of students and teachers hailing from all corners of the globe. As a direct consequence of this, more research has been done on the effectiveness of taking courses online during the pandemic. Researchers, for instance, are concerned about how teachers and students will respond to and adjust to the advent of online education in light of the rapid pace of technological advancement (Hebebci et al., 2020; Spoel et al., 2020; Moawad, 2020). There has been a great deal of discussion regarding responses on a national, institutional, and educational level to the closure of schools and colleges (Flores & Gago, 2020; Johnson et al., 2020; Supriyanto et al., 2020). In addition, a growing body of research

recognises the effect that the pandemic has had on clinical education for medical students (Choi et al., 2020; Pather et al., 2020; Soled et al., 2020). However, the focus of the majority of researchers has been on K-12 (Christakis et al., 2020), higher education (Mishra et al., 2020; Toquero, 2020), and teacher preparation. (Christakis et al., 2020; Toquero, 2020). However, the vast majority of the research done in this area disregards the significance of vocational education and training during the pandemic. The pandemic has had significant repercussions for educational institutions of technical training. Because of the unprecedented challenges, vocational schools were forced to cancel or postpone a significant number of the experience courses that they offered, the majority of which were comprised of practicum training and internships. Consider how China prioritised the provision of vocational education in the midst of the epidemic. Over the course of a very brief period of time, over 1,300 specialised universities and over 11,000 specialised secondary schools have reorganised themselves and begun offering courses via the internet (Moawad, 2020). The rapid change has brought to light a number of challenges that were previously obscured. In the meantime, strategies for adapting to online education and extensive real-world experience have grown in vocational institutions, providing a model for vocational training in China and elsewhere (Carrillo & Flores, 2020; Moorhouse, 2020). As a result, the following two questions will be looked into further detail throughout the course of this investigation into vocational education in China. Throughout the course of the epidemic, one question that has come up is this one: to what extent has China's online vocational education been successful? Two, please discuss the development of online vocational education and your predictions for its future. In light of these two concerns, the research team has developed nationwide surveys in an effort to gain a better understanding of the operation of online education within vocational schools. Case studies have also been looked into as part of this research. In addition to this, the study analyses both achievements and setbacks, as well as prospects for future development (Carrillo & Flores, 2020; Moorhouse, 2020).

PROBLEM STATEMENTS

Vocational schools were confronted with challenges and roadblocks, which they needed to overcome. The first thing that needed to be done was to investigate how the traditional classroombased methodology could be replaced by the use of practise training and internships that were completed online (Carrillo & Flores, 2020). A little less than one third of educational establishments do not have internship programmes, and more than one quarter have never provided their students with any kind of practical training at all. In addition to this, a number of educational institutions lacked the principles and direction necessary for online learning (Guo et al., 2022). The vast majority of educational institutions worked to mitigate the impact of the change, but a select few recognised the potential for online education to shake up the status quo of teacher preparation and improve student outcomes. In addition to this, both the teachers in the classroom and the students themselves need to improve their technical service literacy and their practicality. According to the results of the survey, only one third of educational institutions took into account the two most significant challenges associated with online learning, which are a lack of topic knowledge among instructors and inadequate technological support. When the pandemic was over, more than half of the nation's schools planned to train their teachers to teach online (Carrillo & Flores, 2020). On the other hand, more than half of the educational facilities pointed the finger at the students' poor study habits and excessive time spent online as the primary contributors to the problem. The infrastructure for online education was not yet fully developed, and there was no well-established method in place for providing regular online instruction (Moawad, 2020). Some establishments have not yet reached a conclusion regarding whether or not they will keep the recently established online task forces. In addition, there was a lack of both systematic evaluation and ongoing research into the efficacy of online education at a number of different institutions (Guo et al., 2022). There was a significant amount of interest in the online assessment process; however, the majority of institutions did not make the effort to explain either the results or the methods that were used to analyse them. The vast majority of institutions did not provide either regular feedback on evaluation findings nor additional tracking after the evaluation had been completed. In addition to this, it was essential to develop a programme to incentivize online teaching and to further develop the learning support system. The number of schools that have developed policies to ensure the safety and well-being of their students is nowhere near half, let alone the number of schools that have developed policies to incentivize teachers (Moawad, 2020). Only two out of 106 schools mentioned having policies in place to encourage teachers, and only five out of 106 schools mentioned having student learning security policies. One of the issues was the outdated nature of the technology that was available at the time. Only a small number of educational institutions had either implemented technology assurance or response metrics for digital pedagogical materials (Carrillo & Flores, 2020). At the same time, more than a quarter of schools made short-term purchases of online courses or materials. This demonstrates that these institutions lack a solid base of digital teaching resources. Other things, such as student organisations and campus life, were not taken into consideration. An in-depth case study revealed that only a small percentage of schools offer extracurricular activities online, and an even smaller percentage of schools are concerned with the physical and mental growth of their students while they are in school (Moawad, 2020). In addition, it was essential to take measures to protect the intellectual property of educational materials. Only a select few educational institutions have incorporated copyright protection for educational resources found on the internet into their series of policy papers. Only one of the 106 examples provided was successful in raising awareness about copyright issues regarding online resources (Carrillo & Flores, 2020).

LITERATURE REVIEW

According to the findings, online education in vocational colleges fared well despite the epidemic. This was the case despite the fact that the epidemic occurred. The implementation of online learning was the deciding factor that determined whether or not vocational education would be successful as a whole (Guo et al., 2022). The number of states in which students can enrol in online courses has seen a notable increase, according to data compiled by education authorities in a number of different Canadian provinces. Participation was achieved by more than seventy percent of teachers and almost eighty percent of students. On the other hand, 87 percent of both students and their parents reported being content with the online educational opportunities they had been

provided. Even if students were "Not Going to School" as a result of the epidemic due to the prevalence of online education, classes continued as normal (Moawad, 2020). Second, because of online education, the efficiency of administration, management, and technical support has significantly improved. Several departments within vocational schools collaborated and organised themselves into task forces in order to ensure that online education ran efficiently. Everyone did what they needed to do, collaborated well, and was successful in reaching their goals. The majority of educational institutions are putting in place interim structures to ensure that online classes continue to function normally (Moawad, 2020). The numerous services provided by school administrators and teachers, such as student learning support service teams, contributed to a student's enhanced comprehension of the wider world beyond the four walls of the school. Additionally, schools have continued to place an emphasis on students assisting other students, which has, in the end, led to the development of a student-teacher organisation based on a system of mutual assistance. Because of online education, improvements have also been made to a variety of infrastructures and services (Guo et al., 2022). The most reputable institution of higher learning provided substantial technological support for the growth of online education. Support measures consisted of enhancing the capacity of the campus network, the performance of servers, the performance of online learning application software, the availability of online pedagogical materials, and the coordination of internal and external technical teams. However, these are not the only support measures that were implemented. In addition, the rise of virtual extracurricular activities can be attributed to the rise of online education (Flores & Gago, 2020). During the pandemic, several vocational schools conducted experiments with online extracurricular activities in order to learn more about how to construct a campus culture that can exist entirely online. The purpose of these experiments was to learn more about how to build an online community. In the end, it was the advent of online education that paved the way for the widespread adoption of technology in educational settings (Flores & Gago, 2020). Through participation in online learning, vocational schools have developed their understanding of and expertise in the administration of online education. Online education is being considered by a number of educational institutions as a potential means by which they can advance their efforts to bring information technology into the classroom (Guo et al., 2022).

Students need to have a higher level of digital awareness in order to make progress in their education regarding digital literacy. When it comes to the collection of data, the level of digital awareness possessed by students is indicative of their knowledge, perspective, value orientation, and capacity to judge, in addition to their awareness of and familiarity with data and data sources (Li et al., 2017). The level of digital literacy possessed by college students can be improved in a variety of ways, one of which is by placing a greater emphasis on the teaching of digital literacy as part of China's digital strategy. The use of the Internet and other digital technologies by educational institutions is recommended as a first step toward the achievement of individualised and accurate instruction and the promotion of increased dialogue between college students and information technology teachers (Flores & Gago, 2020). In addition, it is essential to make independent use of the national smart education platform for the purpose of research and study, to

improve the level of digital communication literacy among college students, to establish an official account, to advocate for the natural blending of short video products, micro-communication strategies, and Convergence Media platforms, and to advocate for the natural blending of interactive communication and visual presentation. In addition, educational institutions should actively support the construction plan for digital China by familiarising students with data-related knowledge, legislation, and regulations. Digital knowledge is the body of information that pertains to digital technologies as well as the processing and analysis of digital data, and it serves as the conceptual basis for digital literacy (Li et al., 2017). As digital technology advances, new fields of study emerge at the leading edge of the field, and new fields of study emerge that cross traditional boundaries. This creates the technical environment in which college students may broaden their understanding of digital topics in a manner that is comprehensive. Access to specialised training and education in digital information is the primary advantage that may accrue to college students studying a wide variety of subjects as a direct result of this trend (Li et al., 2017). Second, it provides students in higher education with powerful technological assistance for the instruction of digital literacy, which enables them to apply their knowledge and piques their interest in further study (Flores & Gago, 2020). Thirdly, it engages in theoretical research through projects, forums, lectures, and other similar activities in order to methodically classify and evaluate authoritative accomplishments, broaden the horizons of digital knowledge learning, draw on innovative potentials, and direct practise, as well as critically examine and address new problems in the real world.

Increasing the Students' Opportunities to Develop Their Digital Skills in Vocational College The ability to acquire and utilise digital resources, as well as the capability to process, present, and evaluate digital content, etc., are at the core of what it means to be educated in digital literacy. The digital China strategy places a strong emphasis on increasing students' familiarity with various digital tools, which is emerging as a potential driving force behind the development of digital campuses. The primary objective is to teach students how to be more precise in their data collection efforts in order to improve the reliability, consistency, timeliness, and relevance of digital information. Second, it seeks to improve students' abilities to analyse and integrate digital information, to recognise valuable core digits by weeding out the irrelevant and keeping the relevant, and by smoothing out the rough spots in order to get to the heart of the matter at hand, all of which are accomplished through a comprehensive data analysis. Third, it aims to prepare students for careers in which they will be required to analyse and integrate digital information. Thirdly, it is to help students in higher education develop better abilities in areas such as digital collection and sorting, digital governance, digital management, digital storage and application, digital resource construction, digital analysis and interpretation, and other digitally enhanced pedagogical qualities. These will all aid in the students' ability to solve problems, network, and analyse complex digital information (Li et al., 2017).

Big data, blockchain, artificial intelligence, and other technologies form the backbone of the education metaverse, which employs their respective strengths—data collection, processing, and value discovery; timestamping and consensus protocol; and intelligent processing—to address the

unique challenges presented by education data, such as its imprecision, unreliability, and lack of continuity. This allows the education metaverse to address the unique challenges presented by education data, such as its imprecision, unreliability, and lack of continuity (Gao & Yu, 2020). A stake can be said to be held in the evaluation process by anyone, including students, schools, parents, businesses, and even oneself. The use of a wide range of criterion for evaluation provides substantial assurance that educational programme evaluation will be reliable and comprehensive. On the other hand, we are now evaluating the process as a whole as opposed to just focusing on its individual components. The process assessment happens on multiple levels, such as "before class, during class, and after class," "school, family, and society," and so on, thanks to the intelligent technologies that can translate the enormous data into the process record. These assessments take place "before class, during class, and after class." Both the students' current situations and their historical records can be utilised in order to make an accurate assessment and take prompt action. It has been accomplished to reach the level of accurately assessing performance and outcomes (Gao & Yu, 2020). The educational metaverse is a place where various types of educational practises, such as inquiry-based learning, experiential learning, thinking training, problem-based practise, and so on, can all find a place to call their own. As a consequence of this, the emphasis of learning evaluation shifts from the mastery of content to higher-order thinking, which is essential for the all-around development of students.

The educational metaverse has the potential to provide a learning environment that is deeply integrated with both the virtual and real worlds. This would result in an expansion of the educational sphere, the promotion of interaction between individuals, schools, and society, the facilitation of fruitful partnerships between educational institutions and businesses, and the realisation of benefits for all parties involved (Gao & Yu, 2020). The educational metaverse provides institutions of higher learning with access to a plethora of pedagogical resources as well as practise environments that are highly realistic. Everyone can benefit from combining their studies with their actual work. There will no longer be any inconsistencies between what is taught in the classroom and what is learned through practical experience. When working with schools, a company can make the most effective use of their resources and reduce the likelihood of the "fireplace effect" by utilising the education metaverse, which is beneficial from the company's point of view. Students will emerge as the biggest winners from this. They are able to not only enter and exit the educational world as they see fit, but also increase the regularity with which they alternate between working and studying, combine theoretical knowledge and practical abilities, and strengthen their professional capabilities without being constrained by geography. The development of information technology has had an impact on the ways in which people think and acquire knowledge. Vocational students of today need to be equipped with the inventive spirit and lifelong learning skills that can be fostered through the use of technology in order for them to be able to adapt to the changing circumstances and future demands that will be placed on the workforce. Vocational education will equip students with the skills necessary for them to be successful in the digital age, and this preparation will be tailored to the students' existing levels of literacy (Gao & Yu, 2020). A closer pairing of technology and education can be beneficial for a

number of different learning capabilities, including information literacy, vocation informatization, and the capacity for lifelong learning. Students benefit from this approach because it encourages them to develop skills that will help them become better digital citizens, knowledge builders, creative designers, computational thinkers, communicators, and global collaborators.

METHODOLOGY

Studying information that has already been made available to the general public is an example of what is known as secondary data analysis. One example of a qualitative research approach is described as being the examination of a book or diary that has already been published. An illustration of this would be a literature review that incorporates well-established critical theory (Abdulaziz, 2022). Research in accounting may also make use of quantitative methods, such as when academics evaluate historical financial reports to determine the efficacy of various types of bookkeeping. Due to the relatively low cost of conducting this kind of research, it is frequently included in academic publications such as journal articles, theses, and dissertations. This research strategy is both time and resource efficient because all that is required is a visit to a college or public library to potentially uncover a wide range of results. While it is true that this information is helpful, it may be more challenging for some individuals to maintain an objective stance and stay on topic while applying it.

ANALYSIS

As a result of the importance that the Party Central Committee and the State Council attach to the cultivation of a skilled labour force for the digital China project, they are putting a significant amount of effort into advancing the national education digitalization agenda as an integral component of the digital China strategy (Gao & Yu, 2020). The student bodies of colleges and universities need to be adequately prepared for the new challenges that will be presented by the digital China plan, which requires those institutions to make significant efforts. Colleges and universities need to actively participate in the implementation of the spirit of documents such as the "Action Plan for Enhancing the Digital Literacy and Skills of the People" and the "Guiding Opinions on Promoting the Development of New Educational Infrastructure and Building a Highquality Education Support System" in order to promote the high-quality development of education with digital transformation and intelligent upgrading, as well as to popularise the knowledge of digital literacy (Hong et al., 2019). This will help to popularise the knowledge of digital literacy. Instruction in digital literacy needs to be incorporated into the curriculum at all levels for higher education institutions to effectively adapt to the digital China growth plan and offer talent support for the construction of digital China. This will allow higher education institutions to offer talent support for the construction of digital China (Flores & Gago, 2020).

The Provision of a Conceptual Backbone for the Development of Digital Campuses The development of digital campuses is a representation of the revolutionary educational modernization brought about by the digital age. The objectives of the digital campus platform include realising education informatization and EdTech, expanding business functions, increasing the efficiency of campus operations, increasing the time and space dimensions of the physical campus, and expanding the dimensions of time and space. Collecting, processing, integrating,

storing, transmitting, and applying information about the campus are the steps that bring about this result (Hong et al., 2019). As a component of the digital campus buildout, there is an urgent requirement to improve the level of digital literacy among college students. In order to provide intelligence support for the improvement of the digital campus construction, it is necessary to lay the groundwork for a profound understanding of digital literacy. This is done to ensure that college students have a high level of digital professional knowledge and skills. In addition, a scientific view of data must be established, and digital literacy education must be subtly transformed into the inner strength of college students (Flores & Gago, 2020).

While "China's Education Modernization 2035" calls for a "acceleration of the educational reform in the information age," the reform of digital literacy education needs to be deepened in order to promote the connotatively high-quality development of colleges and universities during the 14th Five-Year Plan period. This is because "China's Education Modernization 2035" calls for a "acceleration of the educational reform in the information age." Right now, improved training in digital literacy is something that is absolutely necessary. It is imperative that, in the melting pot of 21st-century science and technology, a renaissance of sorts of digital literacy education take place. Integration of digitalization, visualisation, contextualization, scenario, interactive experience, education, and teaching are all necessary components for students to fully comprehend the meaning of digital campus construction when it is taught as part of a digital literacy curriculum. Building digital campuses incorporates the innovation and reform of "digital education," which is a vivid practise of advancing the modernization of education and a real manifestation of the execution of the spirit of the National Education Conference (Hong et al., 2019). This is a vivid practise of advancing the modernization of education and a real manifestation of the execution of the spirit of the National Education Conference. The digital campus encourages the development of novel approaches to experiencing digital teaching, which in turn broadens the meaning, shape, and scope of education. In today's world, it is impossible to avoid the need for innovative digital literacy education (Hong et al., 2019).

FINDING AND RECOMENDATION

Suggestions for the development of the online educational landscape in the future the convergence and innovation of real economy and network economy is one emerging pattern that is emerging as part of the process of modernising and modernising industries. It is a no-brainer to encourage the use of the Internet in conjunction with vocational training if one is concerned about the future of modern vocational education (Xin et al., 2020). It has been demonstrated that the development of the Internet allowed civilization to function normally despite its isolation, and that basic human needs were met even during the epidemic. Additionally, it has been demonstrated that this occurred despite the epidemic. Because of the epidemic, using the internet has become the new standard. It is imperative that China create a system of vocational education that is adaptable enough to meet the needs of workers at all stages of their lives in order for the country to meet the challenges posed by its ongoing industrial revolution (Flores & Gago, 2020). The development of information technology has had an impact on the ways in which people think and acquire knowledge. Vocational students of today need to be equipped with the inventive spirit and lifelong learning skills that can be fostered through the use of technology in order for them to be able to adapt to the changing circumstances and future demands that will be placed on the workforce. Vocational education will equip students with the skills necessary for them to be successful in the digital age, and this preparation will be tailored to the students' existing levels of literacy (Xin et al., 2020). A closer pairing of technology and education can be beneficial for a number of different learning capabilities, including information literacy, vocation informatization, and the capacity for lifelong learning. Students benefit from this approach because it encourages them to develop skills that will help them become better digital citizens, knowledge builders, creative designers, computational thinkers, communicators, and global collaborators. During the epidemic, the vast majority of vocational educators increased their level of expertise with the Internet. The liberating effects of technology make it possible for there to be revolutionary shifts in educational tenets, curriculum, and approach (Huang et al., 2019). These shifts could be a game-changer. Both the teachers' ability to use technology effectively in the classroom and their ability to think creatively about technology must be developed (information and communication technology). In order to keep up with the rapid pace of technological developments such as big data and artificial intelligence, information professionals need to develop new skills, broaden their pedagogical horizons, and enhance their students' capacity for digital learning (Huang et al., 2019). Only then will they be able to remain relevant in their fields. They are also better able to incorporate technology into their lessons, which ultimately results in an improvement in the overall quality of the instruction that they provide. Open Educational Resources (OERs) were first officially called for in a proclamation issued by UNESCO in the year 2002. OERs include things such as full courses, electronic textbooks, multimedia courseware, micro-lecture videos, electronic exam questions, teaching materials, and tool software, among other things. By adopting the model of open educational resources and encouraging the sharing of extremely modular and material vocational educational materials, teachers can better restructure their own classrooms and provide students with a better learning environment (Xin et al., 2020). In terms of the development of open educational resources (OERs) for vocational education, the issue that vocational education does not provide a practise environment is one that is being proposed as having a viable solution in the form of virtual reality simulation (Flores & Gago, 2020). The availability of resources for virtual reality simulation training must overcome a number of obstacles, all of which are influenced by a variety of societal factors. These obstacles include high levels of technical content and professionalism, the ability to meet the demands of post-ability training, large cost investments, and protracted development cycles. As a result, the relationship between educational establishments and businesses is absolutely necessary to the development of (Huang et al., 2019). The establishment of a digital campus is the final step in the development of modern vocational education, which represents the evolution of contemporary vocational education. As a consequence of this, the breadth of what can be learned in a vocational setting is expanded, and the cultivation of specialised talent is ensured (Tan & Zhou, 2022). The digital campus is an informatization environment that emerges as a result of the online virtual campus and the actual physical campus having close connections with one another and being interactive with one another. It facilitates the improvement of vocational schools

by bringing pedagogy, learning, administration, and service delivery into the modern era by means of differentiated instruction, individualised learning, and intelligence (Huang et al., 2019). Building and deploying digital campuses in vocational education should centre on improving both the students' and teachers' technical and organisational literacy in order to better prepare them for the workforce. This can be accomplished by improving their exposure to new technologies. A modern digital campus environment can be built to promote a free and personalised learning atmosphere by utilising mode innovation, value reconstruction, structural reorganisation, process reengineering, and cultural reconstruction. This can be accomplished through the use of value reconstruction (Xin et al., 2020).

CONCLUSION

The goal of "Not Going to School but Classes Continue Ongoing" was established by the Chinese Ministry of Education, and it was a goal that vocational schools in the spring of 2020 were able to accomplish through the use of online learning despite the spread of the pandemic. There were three different forces at play in this scenario, but let's begin with the power of the system (Tan & Zhou, 2022). The powerful leadership of the Communist Party of China and the superiority of the socialist system were reflected in the timely information, effective guidance, and promotion of active sharing of high-quality learning resources provided by the institutions, which ranged from the Ministry of Education China to local education departments and then on to various colleges and schools. This was done by all of the institutions. The liberation of the nation's structural power at this time made possible the continued expansion of online educational opportunities (Flores & Gago, 2020). Second, administrators and teachers gave compelling examples of the positive effects of taking personal responsibility for one's actions. They committed themselves to furthering their education by using the resources available online and worked extra hours during times of crisis for which they were not compensated. The efficiency of the technology comes in third. During the past decade, China's vocational schools have made significant progress toward expanding their information technology infrastructure (Tan & Zhou, 2022). During the pandemic, schools that have a stronger foundation for the construction of digital campuses have found that providing education through online platforms is more manageable. In the meantime, the growth of the Internet has made it possible for vocational schools to break through the "wall" of secrecy that once prevented them from receiving outside technical support for online education. Previously, this support could only be obtained from within the institution. On the other hand, during the pandemic, the majority of vocational institutions will only use online education as a last resort. It is essential to keep in mind that the transition from an industrial society to an informational society is accompanied by a number of significant shifts (Flores & Gago, 2020). The old adage states that "every crisis presents an opportunity," and it is important to keep this in mind. It is essential, for the growth of vocational education in the digital era, that we reform the way in which and the way in which we approach it. Higher education establishments should take the lead in putting the Digital China Strategy into action. This can be accomplished by enhancing the digital construction of education and teaching resources such as digital classrooms, smart libraries, smart dorms, and smart restaurants, and by promoting the digital literacy education of college students (Tan & Zhou, 2022). This will allow

students to keep up with the times in terms of new ideas, concepts, and methods. They need to coordinate and match the new characteristics of digital literacy education for college students under the digital China strategy, be in line with the digital thinking under the digital China strategy and carry out the integration of digital literacy education and digital skills training. In addition, they need to consider the improvement of college students' digital literacy and skills to be a strategic task.

REFERENCING

- 1. Assunção Flores, M., & Gago, M. (2020). Teacher education in times of COVID-19, institutional and pedagogical responses. Journal of Education for Teaching, 1-10.
- 2. Carmen Carrillo & Maria Assunção Flores. (2020). COVID-19 and teacher education: a literature review of online teaching and learning practices, European Journal of Teacher Education, 43:4, 466-487.
- 3. Choi, B., Jegatheeswaran, L., Minocha, A. et al. (2020). The impact of the COVID-19 pandemic on final year medical students in the United Kingdom: a national survey. BMC Med Educ 20, 206 (2020).
- Christakis DA, Van Cleve W, & Zimmerman FJ. (2020). Estimation of US Children's Educational Attainment and Years of Life Lost Associated With Primary School Closures During the Coronavirus Disease 2019 Pandemic. JAMA Netw Open. 3(11):e2028786.
- Gao, Z., & Yu, T. (2020, March). Research on the development of higher vocational education in China in the 21st Century. In 4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020) (pp. 742-745). Atlantis Press.
- Gao, Z., & Yu, T. (2020, March). Research on the development of higher vocational education in China in the 21st Century. In 4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020) (pp. 742-745). Atlantis Press.
- Guo, W., Wu, D. F., Li, Y., Wang, F. X., Ye, Y. Q., Lin, H. W., & Zhang, C. F. (2022). Suitability evaluation of popular science tourism sites in university towns: case study of guangzhou university town. Sustainability, 14(4), 2296.
- Hebebci, M. T., Bertiz, Y., & Alan, S. (2020). Investigation of views of students and teachers on distance education practices during the Coronavirus (COVID-19) Pandemic. International Journal of Technology in Education and Science (IJTES),4(4), 267-282.
- Hong, C., Zhang, Q., Zhang, Y., Davis, S. J., Tong, D., Zheng, Y., ... & Schellnhuber, H. J. (2019). Impacts of climate change on future air quality and human health in China. Proceedings of the national academy of sciences, 116(35), 17193-17200.
- Huang, X. B., Zhang, Y., Wang, T. D., Liu, J. X., Yi, Y. J., Liu, Y., ... & Chen, M. (2019). Prevalence, awareness, treatment, and control of hypertension in southwestern China. Scientific reports, 9(1), 19098.

- 11. Irene van der Spoel, Omid Noroozi, Ellen Schuurink & Stan van Ginkel (2020) Teachers' online teaching expectations and experiences during the Covid19-pandemic in the Netherlands, European Journal of Teacher Education, 43:4, 623-638.
- 12. Johnson, N., Veletsianos, G., & Seaman, J. (2020). U.S. faculty and administrators' experiences and approaches in the early weeks of the COVID-19 pandemic. Online Learning, 24(2), 6-21.
- Lam, T. T. Y., Jia, N., Zhang, Y. W., Shum, M. H. H., Jiang, J. F., Zhu, H. C., ... & Cao, W. C. (2020). Identifying SARS-CoV-2-related coronaviruses in Malayan pangolins. Nature, 583(7815), 282-285.
- 14. Li, L., Wang, Y. Y., Wang, S. B., Li, L., Lu, L., Ng, C. H., ... & Xiang, Y. T. (2017). Sleep duration and sleep patterns in Chinese university students: A comprehensive metaanalysis. Journal of Clinical Sleep Medicine, 13(10), 1153-1162.
- 15. Lokanath Mishra, Tushar Gupta, & Abha Shree. (2020).Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. International Journal of Educational Research Open, Volume 1.
- 16. Soled, D., Goel, S., Barry, D., Erfani, P., Joseph, N., Kochis, M., Uppal, N., Velasquez, D., Vora, K., & Scott, K. W. (2020). Medical Student Mobilization During a Crisis: Lessons From a COVID-19 Medical Student Response Team. Academic medicine: journal of the Association of American Medical Colleges, 95(9), 1384–1387.
- Supriyanto, A., Hartini, S., Irdasari, W. N., Miftahul, A., Oktapiana, S., & Mumpuni, S. D. (2020). Teacher professional quality: Counselling services with technology in Pandemic Covid-19. Counsellia: Jurnal Bimbingan dan Konseling, 10(2), 176-189.
- Tan, H., & Zhou, G. (2022). Gentrifying rural community development: A case study of Bama Panyang River Basin in Guangxi, China. Journal of Geographical Sciences, 32(7), 1321-1342.
- 19. Toquero, C. M. (2020). Challenges and Opportunities for Higher Education Amid the COVID-19 Pandemic: The Philippine Context. Pedagogical Research, 5(4).
- 20. Xin, S., Zheng, Y., & Xin, Z. (2020). Changes in work-family conflict of Chinese employees: A cross-temporal meta-analysis, 2005–2016. Frontiers in Psychology, 11, 124.
- 21. Yue, X., Yang, S., Chen, B., Wanglee, W., & Ye, Y. (2022). A Review on Higher Education of Belt and Road Initiative: Key Findings and Emerging Themes. Higher Education Studies, 12(2), 93-111.
- 22. Zhu, N., Gao, L., Wang, J., Wang, Y., Huang, Z., Guo, N., & Feng, Y. (2021). Professional Qualities of Special Education Itinerant Teachers: A Qualitative Study from China. International Journal of Disability, Development and Education, 68(6), 742-757.