

Reflection on Online Class Conducted in a Rural Area via Ding Talk

Shubing Liang¹ , Haibo Xu², Zhifa Xu³

¹The University of Nottingham, Nottingham, UK

²Foshan, China

³Naji Middle School, Jiangmen, China

Email: sbxsl4@nottingham.edu.my, 1441227739@qq.com, 365379316@qq.com

How to cite this paper: Liang, S. B., Xu, H. B., & Xu, Z. F. (2023). Reflection on Online Class Conducted in a Rural Area via Ding Talk. *Creative Education*, 14, 417-427. <https://doi.org/10.4236/ce.2023.142027>

Received: December 14, 2022

Accepted: February 25, 2023

Published: February 28, 2023

Copyright © 2023 by author(s) and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Many challenges emerge in the education of China. One is the psychological impact of children's loneliness caused by school closures. Technology has become the most powerful teaching tool since online classes in rural areas cannot achieve the original goals. The author's prior visions are analyzing the use of technology and making it suitable for facilitating online teaching in rural Chinese regions. The author is trying to address the issues, discuss them concerning educational theories and provide some possible solutions in education technology.

Keywords

Collaborative Learning, Educational Technology, Rural Area, Online Classes, Social Context of Learning

1. Introduction

1.1. Background

Information and communication technologies in China

ICT has grown to be significant content in schools. Teaching and learning have been continuously reformed under technology (Voet & De Wever, 2017). Nevertheless, the historical empirical studies of teachers' employing technology in regular classroom activities were barely known. ICT demands extra time, knowledge, and skills (Zhao et al., 2022).

Recent governmental educational policies

Since September 2021, China has enacted a program known as Double Reduction (Zhang, 2021) aimed at reducing the students' homework both from school and off-campus academic training centres. All commercial subject-related insti-

tutions were forced to shut down. The homework decreases, and students have more time for flexible activities. Therefore, when these factors are combined at a stage, lots of potential threats or challenges will come out to the surface.

Online class conducted under Lockdown Policy

Due to the Chinese Lockdown Policy in the last 3 years, online classes have been carried on, from kindergartens to universities. 1.6 billion learners were reported to have been impacted because of school closures (UNESCO, 2021). Large-scale online education lacked real-world application scenarios and was only utilised as a supplement to traditional classroom instruction (Zhou et al., 2020). Teachers in middle schools almost changed their teaching practice to online platforms like Ding Talk overnight without enough training in designing online classes and applying technology to teach. Ding Talk readily provides instant video playbacks and communication for teachers and students (Jiang & Ning, 2022).

Challenges appearing in Online Classes

Despite the benefits of online classes, the sudden change in teaching and learning modes exposed many challenges, like network connectivity issues, less engaging classrooms, and poor student engagement and involvement (Mekonen & Nneoma, 2021). Whether students' self-regulation and self-control ability in middle school when facing the Internet temptation has a clear connection to their academic performance has not yet been found (Hardin, 2021).

Even though rural poverty in China fell year by year, and the poverty rate was less than 1 percent of the population in 2019 because of the increasing proportion of people working outside the villages (Lugo et al., 2021), not a few studies found out that although migrant workers raised rural communities' living standards, they also had unfavourable effects, such as increasing inequality.

Yang et al. (2016) pointed out that parents' work migration meant the lack of regulation and parenthood, which was unsuitable for children's health and academic performance. The weak relationship, inadequate communication and other non-material level of scarcity problems could also increase the complexity of their education (Guang et al., 2017; Tang et al., 2018; Wang et al., 2019).

Even though CNNIC (2021) indicated that there were 1.051 billion Internet users in China, it doesn't mean that the people in rural areas enjoyed good Internet connections and had facilities qualified enough for online education. The social-distancing learning and teaching in rural areas has led to great inconvenience and intensified teachers' stress (Li et al., 2022).

To put it in a nutshell, online teaching may have some disadvantages, such as issues with the internet network and connectivity, a lack of face-to-face interaction between faculty and students, students from rural areas and families with low incomes not having access to the necessary electronic devices for conducting classes, and issues with accessing and limited access to learning platforms (Gowda & Ayush, 2020).

1.2. Problem Statement

On the one hand, regarding the teachers' readiness to use digital technologies for

teaching, Polly et al. (2022) implied that teachers who worked in more rural areas were more insecure with new technology, and the older teachers felt less technologically ready than younger ones and the higher education level, the better readiness to teach with digital technologies. In the rural public secondary school, the author reflects, over 93 percent of the teachers are over 35 with the basic level of the undergraduate degree, the teachers' skills in using Ding Talk may be less efficient than the urban areas (Demir & Walker, 2022; Huang, 2020).

On the other hand, the students' capacity to study via digital technologies has significant challenges except for the inequality in resources like appropriate devices. Rural students may have access to Internet technologies, but they have limited desires or needs to use them as a powerful tool for learning (Arthur-Nyarko et al., 2020; Metheny & Mcwhirter, 2013). They often have less orientation and support from home regarding academic learning and self-efficacy. For them, digital technologies are probably just for entertainment instead of acquiring knowledge. Wadsworth et al. (2008) stated that children were more likely to experience educational difficulties and were at higher risk of having lower lifelong educational attainment when persistent poverty and stress were associated with poverty. They lack the readiness and motivation to use technologies for learning.

Overall, the community's environmental and cultural background also affects students' learning outcomes (Guo, 2018; Gurin et al., 2002; Karemera et al., 2003; McLaughlin & Talbert, 1993). 98% of children live in poverty while growing up in this rural place, which leads to limited learning and communication opportunities, including inadequate support of community resources and community advocacy groups (Wagmiller & Adelman, 2009). The low participation in community events like educational applications, local career fairs and occupation introduction talks will impact their passion for learning (Bright, 2018). Teachers appeared to be unaware of how technology may support inquiry-based learning. Additionally, the infrastructure of schools frequently hindered their broader use of technology to experiment with students (Voet & De Wever, 2017).

What worries me so much is that teachers are busy with the preparation of online teaching materials, homework assignments and assessments, and usages of technology. Few of them are concerned that the school closures may cause some psychological differences between boy students and girl students as there are changes in the learning environment. Several studies on Ebola discovered that poor children had difficulty in accessing learning material, and child labour intensified, and risk of sexual assault for girls heightened, drop-out rate became higher (UNESCO, 2021). Now not much research on these issues has been conducted, but these findings do deserve our deep thought.

2. Related Theories of Social Context of Learning

The study by Li (2022) exposed that almost 47% of 342 students believed teachers knew little about their engagement degree. The school closures lead to less

active participation with peers for students (Demir & Walker, 2022). The widespread experience of loneliness and anxiety needed to be paid much more attention to.

Three enduring dimensions of the social ecosystem were emphasized: relationship, personal development, system upkeep, and system change (Moos, 1996, 2002). The patterns of social climate and learning context have changed means the person-environment transactions happened. Unifying dimensions of diverse social contexts interplay teaching and learning.

If there is not much we can do about the academic performance in the education of rural areas, there must be something that we can do to help with the psychological health education of the children through technology.

2.1. First, Encourage Collaborative Learning (CL)

CL is naturally a distinctive form of human social activity. The benefits (Roger & Johnson, 1994) of it are listed as in following:

- **Social benefits:**

- CL helps to develop a social support system for learners;
- CL leads to build diversity understanding among students and staff;
- CL establishes a positive atmosphere for modelling and practicing cooperation and;
- CL develops learning communities.

- **Psychological benefits:**

- Student-centered instruction increases students' self esteem
- Cooperation reduces anxiety, and;
- CL develops positive attitudes towards teachers.

- **Academic benefits:**

- CL Promotes critical thinking skills
- Involves students actively in the learning process
- Classroom results are improved
- Models appropriate student problem solving techniques
- Large lectures can be personalized
- CL is especially helpful in motivating students in specific curriculum

- **Alternate student and teacher assessment techniques:**

- Collaborative teaching techniques utilize a variety of assessments.

To solve the problem of students' anxiety and loneliness, it is an excellent choice to facilitate a student-centred mode in online classes. Demir and Walker (2022) disclosed that the absence of physical contact and eye contact in a distant learning setting might make it more challenging to learn and understand one another.

According to several studies, project-based learning (PBL) improves students' motivation and in-depth comprehension, and the computer-supported collaborative learning (CSCL) environment fosters collaboration within the project. However, little is known about how instructors or curriculum writers might

structure a PBL-based course around practical exercises (Nakahara et al., 2017). Teachers can learn from the examples of collaborative learning, such as the followings:

- Stump Your Partner
- Think-Pair-Share/Write-Pair-Share
- Catch-Up, Fishbowl Debate
- Case Study
- Team-Based Learning
- Group Problem -Solving, etc.

(Please refer to:

<https://teaching.cornell.edu/resource/examples-collaborative-learning-or-group-work-activities>)

Ding Talk offers a good platform for collaborative learning, but it is not used well. For a specific setting where teaching and learning happen online in a rural area, lots of factors need to be thought in depth. Casting aside all the disadvantages of online teaching, the concrete teaching content and objectives should be well-designed, and the focus should be on developing students' psychological health education. The criteria for evaluating an online class should not be the usual ones. Teachers can provide as many opportunities as possible to trigger students' communication and interaction. If interaction happens, collaborative learning will become possible.

2.2. Secondary, Setting up Community of Practice (CoP)

Social learning happens naturally in schools between, teachers and teachers, students and students and students and teachers (Bandura, 1969; Maccoby, 2007; Theimann, 2016). Bandura (1969) argued that social-learning theory was a continuous process in which established patterns of behaviour were often extinguished or extensively elaborated. Students generated new knowledge more significantly when verbal cues were combined with procedures designed to increase knowledge discriminability. The active teaching and learning activities match one of the characteristics of CoP (Olofson et al., 2016). The goal of CoP is to achieve a common goal by combining individual efforts without being competitive with each other. Everyone can contribute and get a sense of recognition, which may alleviate the students' anxiety and create a comfortable and positive environment for communication. Continuously, frequent interaction or legitimate peripheral participation will make a difference in education.

The value of CoP activities has been studied in depth in a quantitative descriptive study (Hermita et al., 2021). They found out teachers could improve performance through several roles of CoP activities and organize lesson plans for hands-on learning with an understanding of the needs of students. Ulla and Perales's research proved participating in an online CoP could overcome the challenges of emergency remote teaching as well (Ulla & Perales, 2021). Understand the students' needs and let them be the subject of the online lessons with proper teacher guidance. It will be more meaningful if they are just taught without real

engagement. They talk, they act, and they learn. Meanwhile, the negative psychological impact will be minimized, like loneliness created by school closures.

2.3. Finally, Cultivating the Individual Networks of Practice (INoPs)

INoPs (Maccoby, 2007) may help educators and learners more fully grasp the crucial but frequently undervalued social processes that can mediate learning and fully utilise social media platforms and practices for their own learning objectives (Qi & Kim, 2021). Individual learning can be supplementary to collaborative learning. It can help the individual achieve more than they want and maximize and reach their full potential, which is not compulsory, so it will not stress those interested.

Besides associating with online classroom interaction, students also can reach other individuals with Internet access and their relationship connection. For instance, if they know one of their friends' fathers is a computer programmer, they can ask him for help or guide them to join a group of computer programmers. Connecting the network of social relationships will extend students' socialization, providing more chances or channels for students to learn and interact with others. The loneliness caused by limited physical interaction may decrease, eventually contributing to the individual's cultural capital (Lin, 2017).

3. Conclusion

3.1. Rationales for Using Technologies

Some education technologies may potentially help improve the above situations.

ICT was found to be an excellent tool to enhance learning for students, and teachers organized more learning activities that were better technology-based in a survey conducted in the European context (Barrera-Pedemonte, 2016). The followings are some of the technologies that may benefit social learning in rural areas.

3.2. Some Suggestions on Technological Tools for Teaching and Learning

For teachers, apart from setting up an online CoP or a workgroup, the Technological Pedagogical Content Knowledge (TPACK) (Schmidt et al., 2009), which includes students' learning condition, teachers' experiences and the contextual influences, is also available. It can be utilized by teachers as an instrument for evaluation

Olofson et al. (2016) insisted that empowering teachers was an essential effort to realize the excellent quality of education and they recommended TPACK as a way out. They interpreted TPACK as a dynamic process beneficial for conceptualizing teachers' knowledge construction. Teachers could dynamically conduct their process of learning. It served as a means of describing the knowledge needed for instruction in the digital era (Hsu et al., 2013), which is in line with

the idea of [Glassett and Schrum \(2009\)](#) that it can analyze teachers' experience of the practices in technology-rich classroom settings and help teacher choose better technology tools to achieve better students' performance.

Moreover, as tested by [Dong et al. \(2020\)](#) in their research and revealed by [Joo et al. \(2016\)](#), TPACK was vital to reducing teachers' techno stress from using ICT. If TPACK can aid educators in overcoming the psychological strain brought on by technology. If schools could support and increase teachers' computer self-efficacy, teachers' confidence and competencies in technology integration would be improved. Only when teachers are fully prepared can the students grow in the right and positive way.

For students, make good use of ICT. A study on students' technostress with 1785 students investigated discovered that the assistance of administration had a tremendous impact on alleviating students' stress in using ICT, especially for females while males benefited more from peer support ([Zhao et al., 2022](#)). In an online learning context, building up online work groups or CoPs to provide support from peer students, administration support should be given more to the students, while male students should be given more chances to communicate, which will help strengthen collaborative learning. [Dovrat \(2022\)](#) also mentioned that text communications in groups and videoconferencing, two technological communication tools, could be used to form and sustain supportive workgroups. Students will feel more secure and optimistic by getting the support they need. Individual videoconferencing lessons and learning management systems (LSM) were the most perceived effective. Instead of delivering classes with over 40 students within 40 minutes, teachers can split students into small work groups, let them teach for each other and learn from each other effectively ([Khoa et al., 2021](#)). The teachers just need to support with guidance and instructions.

For the less active or passionate students in rural areas, individual calls can be made to regulate since the majority of teachers felt that videoconferencing lessons were the most useful emergent remote teaching instrument for the students and it was valuable in the approaching practice, as recommended by ([Dovrat, 2022](#)). Particular attention should be paid to those who fall behind. Even a simple call will shorten the psychological cognition distance between teachers and students

Efforts could be made from outside, for instance, to improve teachers' ability and empower teachers to realize the excellent quality of education ([Ismail et al., 2021](#); [Ramdhani & Ancok, 2013](#)), including personal, social, and pedagogical competence, and innovation of training method as well ([Krathwohl, 2002](#)), as [Romano \(2003\)](#) addressed the key to bringing about change in education lies with the teachers and working group can be an efficient way to achieve a good quality of teaching ([YULIA, 2017](#)).

For future research, teachers have been busy preparing online teaching materials, homework assignments and assessments and using technology. Few are concerned that school closures may cause psychological differences between boy and girl students ([Duraku & Hoxha, 2020](#)) as there are changes in the learning

environment. For instance, several studies on Ebola discovered that poor children had difficulty accessing learning material, child labour intensified, and risk of sexual assault for girls heightened, drop-out rate became higher (UNESCO, 2021). Not much research on these issues has been conducted, but these findings deserve further research.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Arthur-Nyarko, E., Agyei, D. D., & Armah, J. K. (2020). Digitizing Distance Learning Materials: Measuring Students' Readiness and Intended Challenges. *Education and Information Technologies, 25*, 2987-3002. <https://doi.org/10.1007/s10639-019-10060-y>
- Bandura, A. (1969). Social-Learning Theory of Identificatory Processes. In D. A. Goslin (Ed.), *Handbook of Socialization Theory and Research* (pp. 213-262). Rand McNally & Company.
- Barrera-Pedemonte, F. (2016). *High-Quality Teacher Professional Development and Classroom Teaching Practices: Evidence from Talis 2013*. OECD Publishing.
- Bright, D. J. (2018). The Rural Gap: The Need for Exploration and Intervention. *Journal of School Counseling, 16*, Article No. n21.
- Cnnic (2021). *The 49th Statistical Report on China's Internet Development*. China Internet Network Information Center.
- Demir, B., & Walker, S. L. (2022). Psychosocial Learning Environments: EFL Learners' Voices during a Pandemic. *English Language Teaching Educational Journal, 5*, 16-31.
- Dong, Y., Xu, C., Chai, C. S., & Zhai, X. (2020). Exploring the Structural Relationship among Teachers' Technostress, Technological Pedagogical Content Knowledge (TPACK), Computer Self-Efficacy and School Support. *The Asia-Pacific Education Researcher, 29*, 147-157. <https://doi.org/10.1007/s40299-019-00461-5>
- Dovrat, L. (2022). Perceptions of Emergency Remote Teaching Tools Used during Covid-19 Online Teaching by an Israeli English for Academic Purpose (EAP) Department. *Studies in Technology Enhanced Learning*. <https://doi.org/10.21428/8c225f6e.53d353b7>
- Duraku, Z. H., & Hoxha, N. (2020). The Impact of COVID-19, School Closure, and Social Isolation on Gifted Students' Well-Being and Attitudes toward Remote (Online) Learning (pp. 130-169). In Z. H. Duraku (Ed.), *Impact of the COVID-19 Pandemic on Education and Wellbeing*.
- Glassett, K., & Schrum, L. (2009). Teacher Beliefs and Student Achievement in Technology-Rich Classroom Environments. *International Journal of Technology in Teaching & Learning, 5*.
- Gowda, R., & Ayush, G. (2020). A Study on Advantages and Disadvantages of Online Teaching during Covid-19 with Special Reference to Mangalore University Students. *Vidyabharati International Interdisciplinary Research Journal (Special Issue June 2020), 73-78*.
- Guang, Y., Feng, Z., Yang, G., Yang, Y., Wang, L., Dai, Q., Hu, C., Liu, K., Zhang, R., & Xia, F. (2017). Depressive Symptoms and Negative Life Events: What Psycho-Social Factors Protect or Harm Left-Behind Children in China? *BMC Psychiatry, 17*, Article

- No. 402. <https://doi.org/10.1186/s12888-017-1554-1>
- Guo, J. (2018). Building Bridges to Student Learning: Perceptions of the Learning Environment, Engagement, and Learning Outcomes among Chinese Undergraduates. *Studies in Educational Evaluation*, 59, 195-208. <https://doi.org/10.1016/j.stueduc.2018.08.002>
- Gurin, P., Dey, E., Hurtado, S., & Gurin, G. (2002). Diversity and Higher Education: Theory and Impact on Educational Outcomes. *Harvard Educational Review*, 72, 330-367. <https://doi.org/10.17763/haer.72.3.01151786u134n051>
- Hardin, L. (2021). *Mobile Polling and Self-Regulation: How Students May Be Tempted with Distractions*. Ph.D. Thesis, Temple University.
- Hermita, N., Wijaya, T. T., Fauza, N., Mulyani, E. A., Alim, J. A., & Putra, R. A. (2021). The Important of the Community of Practice (CoP) in Improving the Primary School Teachers' Performance in Riau Province. *Dinamika Jurnal Ilmiah Pendidikan Dasar*, 13, 26-31. <https://doi.org/10.30595/dinamika.v13i1.8712>
- Hsu, C.-Y., Liang, J.-C., Chai, C.-S., & Tsai, C.-C. (2013). Exploring Preschool Teachers' Technological Pedagogical Content Knowledge of Educational Games. *Journal of Educational Computing Research*, 49, 461-479. <https://doi.org/10.2190/EC.49.4.c>
- Huang, Q. (2020). Analysis of the Pros and Cons of Students' Online Courses during the Epidemic and the Prospects for the Development of English Online Platform in Secondary Vocational School. *Education Reform and Development*, 2, 17-21. <https://doi.org/10.26689/erd.v2i1.1323>
- Ismail, S. N., Omar, M. N., & Raman, A. (2021). The Authority of Principals' Technology Leadership in Empowering Teachers' Self-Efficacy towards ICT Use. *International Journal of Evaluation and Research in Education*, 10, 878-885. <https://doi.org/10.11591/ijere.v10i3.21816>
- Jiang, X., & Ning, Q. (2022). Evaluation and Perception of Online Teaching of Molecular Biology Using DingTalk for International Medical Students during the COVID-19 Pandemic. *Biochemistry and Molecular Biology Education*, 50, 494-501. <https://doi.org/10.1002/bmb.21653>
- Joo, Y. J., Lim, K. Y., & Kim, N. H. (2016). The Effects of Secondary Teachers' Technostress on the Intention to Use Technology in South Korea. *Computers & Education*, 95, 114-122. <https://doi.org/10.1016/j.compedu.2015.12.004>
- Karemera, D., Reuben, L. J., & Sillah, M. R. (2003). The Effects of Academic Environment and Background Characteristics on Student Satisfaction and Performance: The Case of South Carolina State University's School of Business. *College Student Journal*, 37, 298-309.
- Khoa, B. T., Kien, D. T., & Oanh, L. T. K. (2021). Students' Learning Management System Adoption Intention in COVID-19: An Integration of TPB and TTF Model (pp. 187-193). In *2021 7th International Conference on Education and Technology (ICET)*. IEEE. <https://doi.org/10.1109/ICET53279.2021.9575102>
- Krathwohl, D. R. (2002). A Revision of Bloom's Taxonomy: An Overview. *Theory into Practice*, 41, 212-218. https://doi.org/10.1207/s15430421tip4104_2
- Li, D. (2022). The Shift to Online Classes during the COVID-19 Pandemic: Benefits, Challenges, and Required Improvements from the Students' Perspective. *Electronic Journal of E-Learning*, 20, 1-18. <https://doi.org/10.34190/ejel.20.1.2106>
- Li, H., Ma, M., & Liu, Q. (2022). How the COVID-19 Pandemic Affects Job Sentiments of Rural Teachers. *China Economic Review*, 72, Article ID: 101759. <https://doi.org/10.1016/j.chieco.2022.101759>

- Lin, N. (2017). Building a Network Theory of Social Capital. In R. Dubos (Ed.), *Social Capital* (pp. 3-28). Routledge. <https://doi.org/10.4324/9781315129457-1>
- Lugo, M. A., Niu, C., & Yemtsov, R. (2021). *Rural Poverty Reduction and Economic Transformation in China: A Decomposition Approach*. SocArXiv. <https://doi.org/10.31235/osf.io/8rbgw>
- Maccoby, E. E. (2007). Historical Overview of Socialization Research and Theory. In J. E. Grusec, & P. D. Hastings (Eds.), *Handbook of Socialization: Theory and Research* (pp. 13-41). Guilford Press.
- McLaughlin, M. W., & Talbert, J. E. (1993). *Contexts That Matter for Teaching and Learning: Strategic Opportunities for Meeting the Nation's Educational Goals*. Center for Research on the Context of Secondary School Teaching.
- Mekonen, Y. K., & Nneoma, N. C. (2021). The Two Sides of Online Learning Post COVID-19: Perspectives of International Students in China. *International Journal of Research Publications*, 71, 44-57. <https://doi.org/10.47119/IJRP100711220211756>
- Metheny, J., & Mcwhirter, E. H. (2013). Contributions of Social Status and Family Support to College Students' Career Decision Self-Efficacy and Outcome Expectations. *Journal of Career Assessment*, 21, 378-394. <https://doi.org/10.1177/1069072712475164>
- Moos, R. H. (1996). Understanding Environments: The Key to Improving Social Processes and Program Outcomes. *American Journal of Community Psychology*, 24, 193-201. <https://doi.org/10.1007/BF02511887>
- Moos, R. H. (2002). 2001 INVITED ADDRESS: The Mystery of Human Context and Coping: An Unraveling of Clues. *American Journal of Community Psychology*, 30, 67-88. <https://doi.org/10.1023/A:1014372101550>
- Nakahara, J., Yaegashi, K., Hisamatsu, S., & Yamauchi, Y. (2017). iTree: Does the Mobile Phone Encourage Learners to Be More Involved in Collaborative Learning? In *Proceedings of the 2005 Conference on Computer Support for Collaborative Learning: Learning 2005: The Next 10 Years!* (pp. 470-478). International Society of the Learning Sciences. <https://doi.org/10.3115/1149293.1149354>
- Olofson, M. W., Swallow, M. J., & Neumann, M. D. (2016). TPACKING: A Constructivist Framing of TPACK to Analyze Teachers' Construction of Knowledge. *Computers & Education*, 95, 188-201. <https://doi.org/10.1016/j.compedu.2015.12.010>
- Polly, D., Martin, F., & Byker, E. (2022). Examining Pre-Service and In-Service Teachers' Perceptions of Their Readiness to Use Digital Technologies for Teaching and Learning. *Computers in the Schools*, 40, 22-55. <https://doi.org/10.1080/07380569.2022.2121107>
- Qi, L., & Kim, J. (2021). Individual Networks of Practice of EFL Learners at a Chinese University: Their Impact on English Language Socialization. *International Journal of Contents*, 17, 62-78.
- Ramdhani, N., & Ancok, D. (2013). Educational Innovations for Empowering Teachers in Accomplishing Better Education in Indonesia. In *Global Innovators Conference 2013* (Vol. 2013). Hamad bin Khalifa University Press. <https://doi.org/10.5339/qproc.2013.gic.11>
- Roger, T., & Johnson, D. W. (1994). An Overview of Cooperative Learning. In J. Thousand, A. Villa, & A. Nevin (Eds.), *Creativity and Collaborative Learning*. Brookes Press.
- Romano, M. T. (2003). *Empowering Teachers with Technology: Making It Happen*. Sca-recrow Press.
- Schmidt, D. A., Baran, E., Thompson, A. D., Mishra, P., Koehler, M. J., & Shin, T. S. (2009). Technological Pedagogical Content Knowledge (TPACK) the Development and Validation of an Assessment Instrument for Preservice Teachers. *Journal of research*

- on Technology in Education*, 42, 123-149.
<https://doi.org/10.1080/15391523.2009.10782544>
- Tang, W., Wang, G., Hu, T., Dai, Q., Xu, J., Yang, Y., & Xu, J. (2018). Mental Health and Psychosocial Problems among Chinese Left-Behind Children: A Cross-Sectional Comparative Study. *Journal of Affective Disorders*, 241, 133-141.
<https://doi.org/10.1016/j.jad.2018.08.017>
- Theimann, M. (2016). School as a Space of Socialization and Prevention. *European Journal of Criminology*, 13, 67-91. <https://doi.org/10.1177/1477370815597254>
- Ulla, M. B., & Perales, W. F. (2021). Emergency Remote Teaching during COVID19: The Role of Teachers' Online Community of Practice (CoP) in Times of Crisis. *Journal of Interactive Media in Education*, 2021, 9. <https://doi.org/10.5334/jime.617>
- UNESCO (2021). *When Schools Shut: Gendered Impacts of COVID-19 School Closures*. UNESCO.
- Voet, M., & De Wever, B. (2017). Towards a Differentiated and Domain-Specific View of Educational Technology: An Exploratory Study of History Teachers' Technology Use. *British Journal of Educational Technology*, 48, 1402-1413.
<https://doi.org/10.1111/bjet.12493>
- Wadsworth, M. E., Wolff, B., Santiago, C. D., & Moran, E. G. (2008). Adolescent Coping with Poverty-Related Stress. *The Prevention Researcher*, 15, 13-17.
- Wagmiller, R. L., & Adelman, R. M. (2009). *Childhood and Intergenerational Poverty: The Long-Term Consequences of Growing Up Poor*. National Center for Children in Poverty.
- Wang, Y.-Y., Xiao, L., Rao, W.-W., Chai, J.-X., Zhang, S.-F., Ng, C. H., Ungvari, G. S., Zhu, H., & Xiang, Y.-T. (2019). The Prevalence of Depressive Symptoms in 'Left-behind Children' in China: A Meta-Analysis of Comparative Studies and Epidemiological Surveys. *Journal of Affective Disorders*, 244, 209-216.
<https://doi.org/10.1016/j.jad.2018.09.066>
- Yang, T., Li, C., Zhou, C., Jiang, S., Chu, J., Medina, A., & Rozelle, S. (2016). Parental Migration and Smoking Behavior of Left-Behind Children: Evidence from a Survey in Rural Anhui, China. *International Journal for Equity in Health*, 15, 1-9.
<https://doi.org/10.1186/s12939-016-0416-7>
- Yulia, H. (2017). Empowering Teachers to Increase a Quality of Indonesian's Education. *Jambi-English Language Teaching*, 2, 37-48.
- Zhang, Z. (2021). Reconstruction and Governance of the Public Education System under the "Double Reduction" Pattern. *Journal of the Chinese Society of Education*, No. 9, 20-26, 49. (In Chinese)
- Zhao, G., Wang, Q., Wu, L., & Dong, Y. (2022). Exploring the Structural Relationship between University Support, Students' Technostress, and Burnout in Technology-Enhanced Learning. *The Asia-Pacific Education Researcher*, 31, 463-473.
<https://doi.org/10.1007/s40299-021-00588-4>
- Zhou, L., Wu, S., Zhou, M., & Li, F. (2020). "School's out, but Class's on", the Largest Online Education in the World Today: Taking China's Practical Exploration during The COVID-19 Epidemic Prevention and Control as an Example. *Best Evidence in Chinese Educatio*, 4, 501-519. <https://doi.org/10.15354/bece.20.ar023>