

# Research on the Budget Evaluation: Training and Its Cost Control for ECE Educators in China

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## Abstract

Human resource training contributes to developing an effective workforce that enhances their performance and adds value to the organization. These principles apply to educators' training programs that ensure the educational system and the infant and young children can gain an innovative curriculum. In essence, the skill development of educators is reflected in the proper development of children. These theoretical and practical skills cover all aspects of early childhood education and foster an attitude toward adaptiveness and innovation. And the current budgeting issues related to Early Care and Education (ECE) schemes and National Teacher Training Program (NTTP) in China have been discussed to indicate the gaps in the educational system and educators' training.

The research is a qualitative study that has selected a specific research philosophy, approach and sampling techniques. It describes the barriers to effective educators' training and provides proper accommodations for constructing a cost-effective plan for them. A qualitative analysis has revealed that micro training and online training are beneficial strategies for managing the cost of their training while maintaining the quality of the training course. Additionally, government and local aid are necessary associating factors that ensure that an effective training system is required to close the gaps in ECE educators' training.

**Keywords:** Human Resource Training, Teachers' Training, ECE, Early Childhood Education, Budgeting, Cost Control

## Introduction

Human resource management is a vast area that includes the operations for developing an efficient and competent workforce. Consideration of personal growth and professional development leads to forming a high-performance force. In education, human resource management should be considered an essential factor as the future of a generation depends on educators' competency. In the case of Early Care and Education (ECE) educators, also called early childhood education teachers, it is seen that they are required to be trained specifically to provide a high-quality teaching-learning experience to infants and young children. Hence, the research is specifically aimed at evaluating the budget for human resource training and the aspect of its cost control for their training.

The current position of human resource training has evolved drastically as the government of China has acknowledged its importance in maintaining a high-quality education system in the country. However, as per Hu et al. (2016), the rural areas of China suffer from challenges regarding early childhood education due to inadequate ECE funding. The prospect of proper human resource training for educators benefits the overall curriculum formation and educational process. But the lack of funding, awareness and the general absence of an appropriate body of training for each educational institution makes it difficult for ECE educators to engage fully with infants and young children. Proper funding is also required to provide ECE educators with resources and opportunities. As stated by So et al. (2020), in most countries, teachers' training is mandated by the government, and its certification is considered professional

excellence. The Chinese government provides various types of teachers' training programs, such as pre-service education and in-service training, which may be three to four years (Mfa.gov.cn, 2022). However, the problem statement that the study seeks to address is the strategies for cost control that will enhance the accessibility of human resource training for ECE educators.

The policymakers have introduced various teachers' training systems to ensure that the gap between the training quality of urban and rural areas is improved. As per Lu et al. (2019), PD Program-National Teacher Training Program (NTTP) was introduced to ensure that teachers' training is conducted effectively. The educational expense for early childhood education takes up 1.24-1.44% of the total educational expenditure (Zhou, 2011). Hence, the budgeting process for ECE educators' training has been lower than required. Additionally, private institutions' training costs may be higher as the government funding is inadequate. Thus, the prospect of cost control of human resource training for ECE educators constructs the paper's primary objective. The programs introduced for human resource training are expected to provide practical and theoretical training among the educators within a limited duration. Thus, providing comprehensive resources and opportunities to the educators for sufficient training may exceed the initial cost estimation. In this regard, the paper further analyses the scope of sustainable policies and the use of technology that may contribute to cost control.

## Literature review

### Importance of human resource training among ECE educators

Human resource training contributes to the overall demonstration of development in practical skills and theoretical knowledge among talents. As per the words of König et al. (2020), proper training among the teachers enables them to become adaptable and innovative in their teaching approach. Especially for early childhood education,

providing a curriculum that is innovative, diverse, and flexible is essential for developing the cognitive mind of children. According to Ratheeswari (2018), early childhood education provides a foundation for later learning. The teachers thus play an essential part in creating a solid foundation that constructs considerable skills among children. The early childhood education curriculum develops social skills, cognitive skills, and psychomotor skills. Hence, coordination and effective communication also take precedence in the teaching-learning process.

Naturally, educators must be acquainted with proper resources and valuable training opportunities to develop their professional skills. As per Tondeur *et al.* (2018), teachers' training in various countries includes a curriculum for technological skill development. Technological skill development and enhancing the competence among teachers help in the classroom. Moreover, the defining factors related to effective childhood education are related to the level of innovative and fun teaching exercises. As described by Frantz *et al.* (2022), the common factor for successful teaching is holding students' attention. Through proper teachers' training, they can identify the resources most effective to engage the students. Thus, through human resource training among teachers, the possibility of effective teaching is enhanced.

The dynamic educational system and student-centered approach all promote the students to develop holistically. According to Kim (2020), teachers' overall attitude and knowledge are required to adhere to the dynamic nature of teaching-learning. Adequate human resource training among teachers ensures that the teachers are acquainted with the proper tools and methods to deliver a high-quality learning experience. On the other hand, Leal Filho et al. (2018) state that the teachers can develop competency for adjusting to the ever-changing nature of teaching principles. The main agenda of teachers' training institutions is to ensure that professional knowledge

among teachers is developed that will aid in their professional journey.

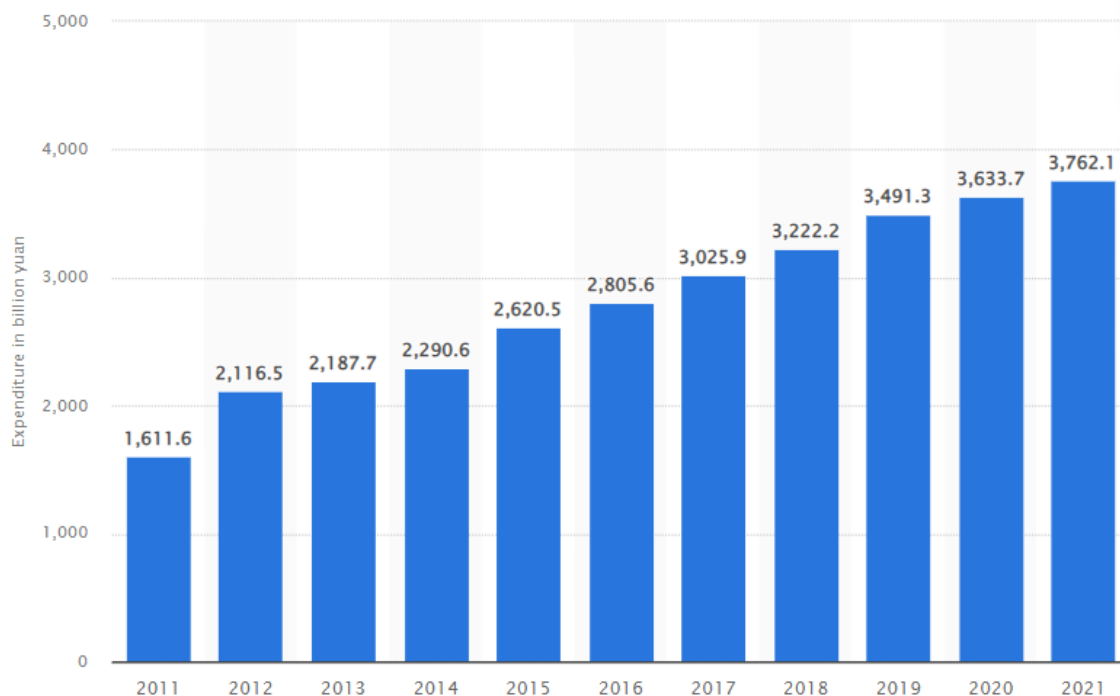
Additionally, the correspondence between teachers and students is essential for impressing the children in early childhood and constructing a solid identity. Human resource training programs ensure that cultural and social sensitivity is inculcated among teachers to foster their personal growth. Thus, considering the multidimensional aspects of human resource training, the importance is undeniable, demanding proper attention for developing an adequate, cost-effective training system.

### Evaluation of the budget for human resource training for educators

ECE educators must develop a robust curriculum that is rooted in innovation and

diversity. These aspects are obtained through proper human resource training systems that ensure professional development and positive attitude creation.

The public expenditure in China in 2021 will be approximately 3.76 trillion Yuan. However, compared to the other developed countries, the current GDP rate in China is still lower (Textor, 2022). In China, the number of full-time teachers is approximately 15 million in various schools and colleges (Oecd.org, 2016). Additionally, the number of teachers is also expanding as it is considered a viable professional option. Thus. Considering these factors indicates that the current expenditure for education in China is inadequate to provide proper training systems.



**Figure 1: Public expenditure in China on education (2011-2021)**

(Source: Statista.com, 2022)

The cost of human resource training for education is higher as the time limitation is 3-4 years. The budget allocated for rural areas is lower than the urban provinces of China. As per Xuehui's (2018) words, the primary gap in training quality and

participation quantity is the lack of proper funding. The training system will require the establishment of an adequate training faculty, but the expense of technological aid must also be included. According to Birkeland and Li (2019), the ECE services have recently witnessed improvement,

enhancing accessibility and affordability in China. However, the government's contribution is still in question and may be considered a significant factor in teachers' training programs.

The initial target for ECE in China has been outlined to reach kindergartens and educational institutions all over the country. As pointed out by Ho *et al.* (2019), the ECE scheme has covered 70% of the lower-level education. However, meeting the initial agenda has not been possible for many reasons, among which finding issues were prominent. Reaching a more comprehensive population from both rural and urban areas can be critical as such an initiative requires adequate funding. According to Zhang *et al.* (2019), the budget for human resource training for teachers has also included equipment and facility costs. The coverage of the overall training program, without adequate funding, is expected to present satisfactory results. Thus, the rate of GDP is lower than expected regarding education in China.

### **Issues and challenges of human resource training and cost control**

The primary issues of human resource training among ECE educators can be assessed from multiple dimensions. The limitations faced by the institutions, the policymakers, and the teachers themselves have accumulated in creating these challenges. According to Zhang *et al.* (2020), teachers' training institutions in Asian countries focus more on training for higher education students. In other words, training systems for kindergarten students are limited. Despite the ECE scheme by the government of China, the lack of coverage in all areas of the country is considered a definite limitation. As per the words of Postiglione and Tang (2019), teacher training institutions that the government does not side tend to collapse due to the lack of financial support. The rate of expense in these institutions is also higher, which prevents the teachers from gaining access.

Cost-effective schemes for early childhood education have also faced challenges due to the lack of sustainable strategy implementation. As Li *et al.* (2019) demonstrated, technological aid is acknowledged by the educational field, especially for higher education purposes. Due to the lack of financial support and professional awareness, such a sustainable aspect of teachers' training is not permitted with importance for early childhood teaching. In essence, the core issue of cost control gives rise to the issues that affect each aspect of teachers' training in China.

The cost of hiring is also expensive and should be calculated when forming a human resource training program for teachers. As per Li *et al.* (2020), the process of directional training in China is lacking in many aspects that hinder the process of human resource training for teachers. The current teachers' training programs cannot reach the teachers from rural areas of the country, thus presenting a gap in the training program. The majority of the challenges have been linked to the lack of financial strength and inadequate government policies that centralizes the process of teacher training for ECE educators. Li *et al.* (2020) argued that a decentralized approach to teacher training in China is necessary for uplifting the poverty-stricken rural areas. The issues and challenges of cost in human resource training integration hold importance as the lack of it is reflected in creating educational gaps for the children. Furthermore, the precarious position of primary education is also dependent on the analysis of specific needs that are to be addressed through training. The specialized and customized approach to effective teachers' training requires more funding, creating a significant issue.

### **Methodology**

The Constitution of a systematic methodology helps develop an effective research plan that is followed to fulfill the aim and objectives of the study. The methodological route is decided based on

the topic and the agendas to be fulfilled by the researcher.

The research has thus selected specific research philosophy, approach, and sampling techniques. As per Mohajan's (2018) words, the selection process of research philosophy is conducted based on the types of principles the study will benefit from. Hence, a positivist research philosophy has been selected due to its ability to discover the truth logically and objectively. Bhatta (2018) stated that the positivism philosophy helps discover the truth embedded in social and tangible patterns. This has helped the research to attain objectivity when analyzing the patterns of financial strength and teachers' training.

A deductive approach has been adopted as well, which has helped evaluate secondary materials thoroughly. According to Armat *et al.* (2018), a deductive approach to academic research ensures that facts are presented and evaluated objectively to make logical conclusions on a specific topic. Additionally, a qualitative approach is adopted to evaluate secondary materials collected from various online databases such as Google Scholar and ProQuest. A targeted search containing specific keywords such as *education, primary teacher' training, human resource training budget, cost control, educational policies*, and so on has been conducted. The sampling process has followed a systematic approach by constructing an inclusive-exclusive criteria list to ensure practical and relevant use of existing information. The evaluation process is conducted through thematic analysis, preserving a systematic structure to the study. Thus, the methodological framework for the study has been able to deliver authentic, relevant, and logical results.

## **Findings and discussion**

### ***Theme 1: significant factors related to budgeting human resource training for ECE educators' training***

The common factors related to ECE educators' training aim at developing interactive and innovative attitudes among them that can be reflected in their professional journey. In essence, when constructing an effective educators' training program, the training aims must remain clear.

According to Loyalka *et al.* (2019), according to the aims of the training program, the selection of resources, tools, and training methodology is completed. Hence, the primary factor influencing the budgeting process can be identified as the agenda of the overall program. As per Xuehui's (2018) statements, the early childhood education programs in China have shown a discrepancy in breaching the gap created between the education system in urban and rural areas. Creating a widespread network for an effective training process must thus be considered. The creation of an effective network that is capable of improving the condition of primary level education in China is to be considered in the budgeting plan.

Moreover, creating a physical environment and recruiting professional trainers are significant factors that require proper financial support. Piper *et al.* (2018) mentioned that the average cost estimation for a professional teachers' training program is \$18000 annually. The factors related to budgeting also include the installment of technology as the current human resource training system puts importance on technologically advanced training systems.

According to Friedler (2018), the hidden costs related to the examination, evaluation, and certification process are generally included in budgeting. Government aids and policies exercise considerable influence on the budgeting as the supportive government policies are a major beneficial factor.

Thus, these significant factors are considered when planning an effective human resource training program, especially for teachers, since each educator must be

equipped with the proper tools and resources for professional development.

***Theme 2: the necessity of training ECE educators effectively***

The world's education system has acknowledged an innovative and student-centered approach to teaching as the most productive one. There is a stark contrast between the old, traditional teachers and new-age primary teachers.

As per Nxumalo *et al.* (2018), the early childhood education curriculum focuses on skill development through play and effective interaction. Each child is provided with exceptional care that can scientifically develop their cognitive, social, and psychomotor skills. According to Shepley and Grisham-Brown (2019), early childhood educators create a healthy and interactive relationship with the students to promote communicative or collaborative learning. Thus, it can be seen that competence, adaptability, and innovative skills among teachers are necessary.

The teaching process of children is fundamentally constructed on developing primary skills among children through stimulative physical and mental activities. According to Yang and Li (2019), the dynamic nature of children's education is to be acknowledged by educators. In other words, the teaching techniques and tools aid the rapid development process among children. Moreover, proper teachers' training is required to foster the right attitudes and behavior for being a model early childhood educator. Hence, with proper theoretical knowledge of child education and practical exercises, the teachers can improve professionally as ECE educators.

The education of early childhood students can encourage self-learning. However, the teachers guide and foster these developments as they stand as role models. As per Sumsion *et al.* (2018), in the early stages of childhood education, the teacher is required to implement educational strategies that heighten the rate of engagement. Some

various factors and techniques are required to be learned by the teachers to provide proper education to children. As Tatlow-Golden and Montgomery (2021) explain, a deep understanding of child psychology is necessary for becoming an effective teacher. The qualities of an early childhood educator are particular, and it needs proper training to ensure that the children are provided with an effective teacher. Thus, considering the various factors discussed above, it can be stated that the necessity of professional ECE educators' training is paramount.

***Theme 3: evaluation of existing strategies and policies for human resource training concerning ECE educators' training***

The government schemes and policies for teachers' training in China address the necessities of developing an effective education system. As per Zhang *et al.* (2020), the NTTP was introduced in China to improve the quality of education in rural areas. However, the NTTP has not been able to provide satisfactory results, and the gap in education between rural and urban areas exists. According to Yemini *et al.* (2019), most Asian countries have developed a 2/3/4 years plan for teachers' training. These training programs can be both pre-service and in-service teachers. However, despite the importance afforded to the status of a teachers' training education, the capacity of existing policy and schemes is lacking.

The number of teachers in China is ever-increasing, yet it is indicated that education expenditure has not been able to meet the OECD standards. In 2020, the number of full-time teachers in China was 66,200 (Textor, 2021). The existing strategies and policies for teachers' training cannot accommodate the increasing number of teachers. On the other hand, Birkeland and Li (2019) stated that the ECE funding for primary education has not been adequate to establish a proper educational structure. The strategies of China regarding the improvement of the educational system have been in effect since the mid-1990s.

Nevertheless, the condition of teachers' training programs, especially for ECE educators, is faced with various limitations, showing the existing strategies' inadequacy.

#### ***Theme 4: cost control strategies for ECE educators' training***

The primary factors for establishing an effective human resource training program should be evaluated to develop proper cost control strategies. These strategies for cost should be in alignment with the program's agenda. As stated by Baker-Henningham (2018), the cost control procedure should be conducted attentively as a program's quality is highly dependent on cost. Generally, it can be asserted that the lack of proper funding causes the program to become ineffective. In this regard, the strategies for cost control for ECE educators' training must be established based on sustainability goals.

The perimeter set for budgeting should be evaluated in the initial stages to assess all relevant costs for developing a teachers' training program. As per the words of Pandey (2019), micro training centers for teachers' training can be beneficial for developing specific skills for teachers at various stages. The customizable approach to teachers' training, providing scope for demonstrating a microenvironment for teachers' training, will be able to address the educational gaps between rural and urban areas as well. Watts *et al.* (2018) stated that building a sustainable training structure requires adequate local aid. Considering the aid of local educational institutions will be advantageous for policymakers. Seeking evaluation in the funding process may benefit the process of acquiring aid in various capacities.

Furthermore, the strategies for cost control may also be achieved by introducing a structure for teachers' training that will cover the general principles of all primary curricula. Shifting the focus from specific to general and allowing the teachers to develop skills based on guided self-study can be effective and cost-friendly. As per Egert *et*

*al.* (2018) views, the introduction of online teachers' training forums and encouraging guided self-study increases the reach of the program. The advantage of higher inclusivity is also rewarded by cost control as the budget for a fully-functional physical environment for training can be reduced. On the other hand, Casillas Martín *et al.* (2020) state that teachers' training programs must provide practical training, imitating real-life teaching situations. Cost control can be achieved by compartmentalizing the time duration for each practice session. In other words, reducing the training time can aid in reducing the budget issues faced in ECE educators' training.

#### **Discussion**

Evaluating the themes discussed above, it can be stated that high-quality teacher training programs for ECE educators are faced with critical issues due to the lack of appropriate policies and funding. Establishing an effective teachers' training program that will develop the theoretical and practical skills among the early childhood educators requires proper funding as it entails the creation of an excellent physical environment for learning, recruiting professional trainers, providing resources and opportunities, and conducting an evaluation and certification process. Other hidden costs are also relevant to human resource training that requires assessment and estimation. Nxumalo *et al.* (2018) stated that the necessity of teachers' training is high in today's generation when the dynamicity of the educational process is being acknowledged. The teachers' training program for early childhood educators is required to ensure that the primary level schools can provide high-quality education. Persevering or maintaining the factor of quality and creating a training program that can accommodate higher quality of teachers enrolled for training are significant factors related to budgeting.

Arguments concerning the educational gap between the urban and the rural regions of China have also been discussed to highlight

the inadequacy of ECE schemes. Furthermore, Zhang *et al.* (2020) describe the teachers' high levels of dissatisfaction in the NTTP. These contentions prove that the government of China is needed to provide policies that will be able to address the current issues in the human resource management of the educational system. Proceeding further in the discussion, it has also been indicated that the increasing number of teachers in China requires a broader network for training. The strategies for cost control require a proper assessment to maintain the high quality of the training program. Pandey (2019) demonstrated that micro training programs could be introduced to advantage the teachers in gaining specific skills. Distance or online training can also reduce the cost of the training. Additionally, with proper government aid and local aid, the establishment of micro training centers in the rural areas of China will contribute to cost control. Thus, the overall discussion provides a clear outline of the necessary measures to be taken for establishing a cost control plan that is sustainable and capable of achieving high-quality teachers' training.

### **Conclusion**

The prospect of budgeting and cost control regarding ECE educators' training is influenced by various factors that have been discussed in the study. The Chinese government's current funding conditions and schemes are unable to reach the desired outcome for educational development. There is a gap in education on the primary level between the rural, and the urban areas of China have been identified. Considering the ECE scheme and NTTP, various scholars have pointed out that the level of proper teachers' training remains unfulfilled. Demonstration of these factors, along with the necessity of effective teachers' training for early childhood educators, has provided a clear indication that proper cost control is required for aiding the process of human resource training for teachers.

The cost control plan should follow the strategies for sustainability and adaptability

for producing effective results. The constituent factors for all relevant expenses are to be evaluated, and the process of cost control may be constructed in alignment with the primary agenda of teachers' training. Providing adequate training for early childhood educators entails the development of their professional skills and knowledge. The environment for child education is rooted in children's engagement and promoting student-centered strategies. Cognitive, psychomotor, and social skills are developed in the primary stages of education. The construction of a curriculum for children is required to follow certain teaching principles that support their natural growth and developmental process—considering these aspects. The necessity of effective teachers' training for early childhood educators is undeniable.

Extensive discussion on the topic has revealed that the cause of the primary barrier to effective teachers' training is the lack of proper funding. The inadequacy of funding for teachers' training has deprived the increasing number of full-time teachers of attaining proper professional training that will help in adding value to the entire education system of the country. Additionally, it has been seen that the Chinese government has presented slow growth in educational development since the mid-1990s. In essence, the benchmark for public spending regarding education is below average, and policymakers are required to revise the existing educational framework. Meeting the agendas of educational development as stated in OECD forums indicates the primary benchmark of education. Hence, the education system will be developed with proper teachers' training.

Lastly, it has been recommended that micro teachers' training centers may aid the current situation that will help in reducing the overall cost of training. Additionally, locally established micro training centers will be aided by the local authority and educational institutes. The use of technology to provide online training courses for aspiring teachers will further help in reducing the cost. The



online training courses will further help promote self-study, enhancing flexibility and innovation. Hence, the quality of the training program will be preserved while reaching a more significant number of participants. Thus, it can be concluded that effective in successfully meeting the goals of teachers' training with proper cost control strategies.

### Reference list

- Armat, M.R., Assarroudi, A., Rad, M., Sharifi, H. and Heydari, A., 2018. Inductive and deductive: Ambiguous labels in qualitative content analysis. *The Qualitative Report*, 23(1), pp.219-221.
- Baker-Henningham, H., 2018. The Irie Classroom Toolbox: developing a violence prevention preschool teacher training program using evidence, theory, and practice. *Annals of the New York Academy of Sciences*, 1419(1), pp.179-200.
- Bhatta, T.P., 2018. Case study research, philosophical position, and theory building: A methodological discussion. *Dhaulagiri Journal of Sociology and Anthropology*, 12, pp.72-79.
- Birkeland, Å. and Li, M., 2019. Building a sustainable future through international ECE partnership programs. *ECNU Review of Education*, 2(4), pp.458-474.
- Casillas Martín, S., Cabezas González, M. and García Peñalvo, F.J., 2020. Digital competence of early childhood education teachers: attitude, knowledge and use of ICT. *European Journal of Teacher Education*, 43(2), pp.210-223.
- Egert, F., Fukkink, R.G. and Eckhardt, A.G., 2018. Impact of in-service professional development programs for ECE educators on quality ratings and child outcomes: A meta-analysis. *Review of educational research*, 88(3), pp.401-433.
- Frantz, R., Douglas, S., Meadan, H., Sands, M., Bhana, N. and D'Agostino, S., 2022. Exploring the professional development needs of early childhood paraeducators and supervising teachers. *Topics in Early Childhood Special Education*, 42(1), pp.20-32.
- Friedler, A., 2018. Teachers training micro-learning innovative model: Opportunities and challenges. *2018 Learning With MOOCS (LWMOOCS)*, pp.63-65.
- Ho, D., Wang, M. and He, P., 2019. The changing landscape of leadership in early childhood education in China. *Teacher education in the 21st century*, pp.1-20.
- Hu, B.Y., Roberts, S.K., Leng Jeong, S.S. and Guo, H., 2016. Challenges to early childhood education in rural China: Lessons from the Hebei province. *Early child development and care*, 186(5), pp.815-831.
- Kim, J., 2020. Learning and teaching online during Covid-19: Experiences of student teachers in an early childhood education practicum. *International Journal of Early Childhood*, 52(2), pp.145-158.
- König, J., Jäger-Biela, D.J. and Glutsch, N., 2020. Adapting to online teaching during COVID-19 school closure: teacher education and teacher competence effects among early career teachers in Germany. *European Journal of Teacher Education*, 43(4), pp.608-622.
- Leal Filho, W., Raath, S., Lazzarini, B., Vargas, V.R., de Souza, L., Anholon, R., Quelhas, O.L.G., Haddad, R., Klavins, M. and Orlovic, V.L., 2018. The role of transformation in learning and education for sustainability. *Journal of cleaner production*, 199, pp.286-295.
- Li, G., Sun, Z. and Jee, Y., 2019. The more technology the better? A comparison of teacher-student interaction in high and low technology use elementary EFL classrooms in China. *System*, 84, pp.24-40.
- Li, J., Shi, Z. and Xue, E., 2020. The problems, needs and strategies of rural teacher development at deep poverty areas in China: Rural schooling stakeholder perspectives. *International Journal of Educational Research*, 99, p.101496.
- Loyalka, P., Popova, A., Li, G. and Shi, Z., 2019. Does teacher training actually work? Evidence from a large-scale randomized evaluation of a national teacher training program. *American Economic Journal: Applied Economics*, 11(3), pp.128-54.
- Lu, M., Loyalka, P., Shi, Y., Chang, F., Liu, C. and Rozelle, S., 2019. The impact of

- teacher professional development programs on student achievement in rural China: evidence from Shaanxi Province. *Journal of development effectiveness*, 11(2), pp.105-131.
- Mfa.gov.cn, 2022. *Teacher Education in China(I)*. Available at: <https://www.mfa.gov.cn/ce/cenp//eng/Education/t167604.htm> [Accessed on: 05.05.2022]
- Mohajan, H.K., 2018. Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*, 7(1), pp.23-48.
- Nxumalo, F., Vintimilla, C.D. and Nelson, N., 2018. Pedagogical gatherings in early childhood education: Mapping interferences in emergent curriculum. *Curriculum Inquiry*, 48(4), pp.433-453.
- Oecd.org, 2016. *EDUCATION IN CHINA*. Available at: <https://www.oecd.org/china/education-in-china-a-snapshot.pdf> [Accessed on: 05.05.2022]
- Pandey, N., 2019. Developing Teaching Competency Through Micro Teaching Approach. *Techno Learn*, 9(1), pp.25-35.
- Piper, B., Zuilkowski, S.S., Dubeck, M., Jepkemei, E. and King, S.J., 2018. Identifying the essential ingredients to literacy and numeracy improvement: Teacher professional development and coaching, student textbooks, and structured teachers' guides. *World Development*, 106, pp.324-336.
- Postiglione, G. and Tang, M., 2019. International experience in TVET-industry cooperation for China's poorest province. *International Journal of Training Research*, 17(sup1), pp.131-143.
- Ratheeswari, K., 2018. Information communication technology in education. *Journal of Applied and Advanced Research*, 3(1), pp.45-47.
- Shepley, C. and Grisham-Brown, J., 2019. Applied behavior analysis in early childhood education: An overview of policies, research, blended practices, and the curriculum framework. *Behavior Analysis in Practice*, 12(1), pp.235-246.
- So, H.J., Jong, M.S.Y. and Liu, C.C., 2020. Computational thinking education in the Asian Pacific region. *The Asia-Pacific Education Researcher*, 29(1), pp.1-8.
- Sumsion, J., Harrison, L., Letsch, K., Bradley, B.S. and Stapleton, M., 2018. 'Belonging' in Australian early childhood education and care curriculum and quality assurance: Opportunities and risks. *Contemporary Issues in Early Childhood*, 19(4), pp.340-355.
- Tatlow-Golden, M. and Montgomery, H., 2021. Childhood Studies and child psychology: Disciplines in dialogue?. *Children & Society*, 35(1), pp.3-17.
- Textor, C., 2022. *Public expenditure on education in China from 2011 to 2021*. Available at: <https://www.statista.com/statistics/455492/china-public-expenditure-on-education/> [Accessed on: 05.05.2022]
- Textor, C., 2021. *Number of full-time teachers in China as of 2020, by education institution*. Available at: <https://www.statista.com/statistics/1049137/china-number-of-full-time-teachers-by-school-level/> [Accessed on: 05.05.2022]
- Tondeur, J., Aesaert, K., Prestridge, S. and Consuegra, E., 2018. A multilevel analysis of what matters in the training of pre-service teacher's ICT competencies. *Computers & education*, 122, pp.32-42.
- Watts, T.W., Gandhi, J., Ibrahim, D.A., Masucci, M.D. and Raver, C.C., 2018. The Chicago School Readiness Project: Examining the long-term impacts of an early childhood intervention. *PloS one*, 13(7), p.e0200144.
- Xuehui, A., 2018. Teacher salaries and the shortage of high-quality teachers in China's rural primary and secondary schools. *Chinese Education & Society*, 51(2), pp.103-116.
- Yang, W. and Li, H., 2019. Changing culture, changing curriculum: a case study of early childhood curriculum innovations in two Chinese kindergartens. *The Curriculum Journal*, 30(3), pp.279-297.
- Yemini, M., Tibbitts, F. and Goren, H., 2019. Trends and caveats: Review of literature on global citizenship education in

teacher training. *Teaching and Teacher Education*, 77(1), pp.77-89.

Zhang, W., Wang, Y., Yang, L. and Wang, C., 2020. Suspending classes without stopping learning: China's education emergency management policy in the COVID-19 outbreak. *Journal of Risk and financial management*, 13(3), p.55.

Zhang, W., Wang, Y., Yang, L. and Wang, C., 2020. Suspending classes without stopping learning: China's education emergency management policy in the *Child Care and Education Policy*, 5(1), pp.29-39.

COVID-19 outbreak. *Journal of Risk and financial management*, 13(3), p.55.

Zhang, Y., Luo, Y., Zhang, X. and Zhao, J., 2019. How green human resource management can promote green employee behavior in China: A technology acceptance model perspective. *Sustainability*, 11(19), p.5408.

Zhou, X., 2011. Early childhood education policy development in China. *International Journal of*