

Early Childhood Teachers Amid China's Curriculum Reforms: From A Literature Review

Dandan Chen¹

University of Illinois at Urbana-Champaign

August 23, 2022

Acknowledgements:

The authors thank Dr. James H. Williams at the George Washington University for feedback on the first draft, Dr. Xiaoyan Liang from the World Bank Group for inspirations, and Dr. Jin Chi from Beijing Normal University for her generous suggestions that helped greatly improve this paper.

¹ ORCID: [0000-0002-4020-3422](https://orcid.org/0000-0002-4020-3422); Email: dandanc3@illinois.edu.

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Abstract

The curriculum is a cornerstone of education systems, and teachers remain one of the pivotal change agents in curriculum delivery. There is a lack of review of teachers' roles in China's curriculum reforms, despite the voluminous research on teachers' involvement in the educational change. This paper synthesizes the literature about early childhood teachers' situation in China's curriculum reforms and elucidates general implications for future attempts to improve teachers' status. It sheds light on the merits and limitations of China's top-down approach to early childhood teacher management.

Keywords: Early childhood teachers, early childhood education, curriculum reforms

1. Introduction

The curriculum is a critical dimension of education systems, and teachers play a pivotal role as a change agent in curriculum reforms. Teachers directly implement the curriculum through learning material selection, lesson planning, and classroom teaching. In this sense, teachers are directly in charge of the implementation of a new curriculum, and they can be seen as the single most important change agent that determines the outcome of curriculum reforms (Suo, 2014). Recently, there is an appeal for more attention to teachers when considering improving education systems (e.g., UNESCO et al., 2016) and some national governments are seeing teachers as the "first resource" for education development (e.g., Central Government of People's Republic of China, 2018). Yet, specifically in the curriculum reform, there is not a clear understanding in China's context regarding what *roles* teachers *have taken* or *should take* in the matter of designing a new curriculum, planning a reform, or implementing a new curriculum to

facilitate the reform endeavors. To some educational practitioners, the roles may appear obvious given their experience, whereas to others, there is a fine line between experiential knowledge and research findings, and that there is a need for evidence-based research to clarify what the roles are and make sure it would be presented in full.

A review of the existing literature about teachers in curriculum reforms is indispensable for clearing up myths and delineating a discernment of what teachers *have done* or *should do* in curriculum reforms. In this article, we aim to bridge an important knowledge gap via a review of the existing literature closely associated with China's early childhood teachers' roles amid ongoing system-wide changes in the curriculum. We intended to answer the following two research questions: 1) What are the crucial relationships, as reflected in the curricular change cycle, that involved teachers in China's curriculum reforms? 2) What roles have teachers been playing in China's curriculum reforms? Throughout this paper, we deem teachers' roles as teachers' positions relative to other change agents in the change cycle of curriculum reforms. We focused on teachers in early childhood education, which has an immense impact on each individual's lifelong learning. For each individual, for instance, skills developed at the early childhood stage lay the foundation for future learning and professional success, and failure to invest in these years can lead to long-term and often irreversible effects (Naudeau et al., 2010). From a societal perspective, the ripple effects of limited early childhood development would pass poverty down across different beneficiaries for generations (World Bank, 2015; Alderman, 2011; Heckman et al., 2009).

Also, in this review, we concentrate on the literature regarding China's case for several reasons. First, China has a huge population of early childhood teachers, which renders its curriculum reforms rather high-stake. Second, early childhood education in China has been open to experiments with various sociocultural elements from other countries, which makes this case

rather thought-provoking through cross-country comparisons. Third, the education reform in China employs a typical top-down approach with high efficiency, which is the approach typically shared by many government-led initiatives from other countries, notwithstanding its limitations. Fourth, China has had a wide array of curriculum reforms, they are ongoing and constantly changing, with complexities brought by its geographic diversity, which makes it rather challenging but especially meaningful to review China's case. Last but not least, China is widely recognized for its large-scale improvement in the accessibility of education for all and is being considered by many other developing countries as an exemplar, considering that millions of the Chinese people were struggling with extreme poverty only a few decades ago.

2. Background: Early Childhood Curriculum Reforms in China

Education reform is often achieved along with socioeconomic movements, including curriculum reform. An overview of the system-wide socioeconomic context in conjunction with curriculum reforms over years would be helpful to elucidate key patterns that support further understanding of teachers' roles in China's curriculum reforms. Table 1, following the illustration from Huo (2015) and Cai (2005), synthesizes the existing literature about four historical stages of China's early childhood curriculum reforms till the end of the 20th century. These stages were all marked by pivotal social movements or pioneering policy initiatives. Over this course of history, China's early childhood curriculum had been open to the curricular models from other countries, as demonstrated by its inclusion of models from Japan, the United States, the Soviet Union, and some European countries.

With China's drastic economic transition from a planned economy to a market-oriented one, China's early childhood curriculum reforms in the 21st century embarked with new characteristics. Different levels of the change cycle started to encourage school-based initiatives

(Hawkins, 2000; Guan & Meng, 2007; Mok & Ngok, 2008). Also, for the first time in history, a national policy document, the *National Outline for Medium- and Long-term Education Reform and Development (2010-2020)* (Central Government of People's Republic of China, 2010), acknowledged early childhood education development as one of the national government's priorities. Moreover, the official document *CCP Central Government and National Congress's Suggestions on Holistically Deepening Reforms to Innovate the Teacher Workforce in the New Era* (Central Government of People's Republic of China, 2018) proclaimed that teachers make the "first resource" for education development and further nation-wide reforms and renovating the teacher workforce is a crucial undertaking of the government.

Pedagogical approaches nowadays typically require teachers to undertake more active roles. In the increased promotion of the school-based execution of the curriculum, school principals tend to have more say in the process to restructure a curriculum. Teachers are encouraged to proactively interact with children, parents, and principals, actively select educational content, design pedagogical methods that meet children's needs, and engage themselves in the decision-making in kindergartens (Li, 2009). It should be noted that *CCP Central Government and National Congress's Suggestions on Holistically Deepening Reforms to Innovate the Teacher Workforce in the New Era* (Central Government of People's Republic of China, 2018) highlighted teachers' proactive role in adjusting to the information society and making the most use of new technologies from artificial intelligence to improve the efficiency of teaching and learning.

Here are some key terms for attention in our focused analysis. Although its meaning, annotation, and implementation may vary by context, we broadly conceived the *curriculum* as an important facet of education quality given UNESCO's definition (UNESCO-IBE, n.d.a). We used *early childhood education* to refer to the education of children aged 0-6. It can be roughly divided

into three stages or types: *nursery schools* for children aged 0-3, *kindergartens* for children aged 3-6, and *preschool* classes for children aged 5-6 in China (Zhu, 2002), though kindergartens in some regions of China also enroll children aged 2-3 (Zhu, 2009). *Teachers* at the early childhood stage included *preschool teachers* and *early childhood teachers*. Most of the research studies covered by our review addressed early childhood teachers. The *educational administration* was conceptualized as the country-level, region-level, and school-level educational authorities.

When zooming in on the *curriculum*, we emphasize the second category of curriculum from Schmidt et al. (1997), namely the Implemented Curriculum, because it is directly connected with teachers. Specifically, *Implemented Curriculum* refers to teachers' actual coverage of the intended curriculum. *Intended Curriculum* refers to the official content standards documents (e.g., syllabus, curriculum plan) or teaching materials (e.g., textbooks, teachers' guides, exercise books) that the educational administration provided. We chose the relatively simple categorization of the curriculum here to help concentrate on the actual *implementation* of the *intended* curriculum through teachers in curriculum reforms.

What are the existing stakeholders involved in the decision-making for curriculum reforms? In general, Schmidt et al. (2001), for example, considered five possible sources of authorities or stakeholders in the curricular decision cycle. They are namely national centers, subnational centers, schools, departments within schools, and teachers. Most recently, Härkki et al. (2020) unveiled the change agents such as collaborators, the school administration, the community, and the regional and national support for teachers' further self-improvement in curriculum reform in Finland. Liu and Teddlie (2003) identified four types of stakeholders in China's education system. They consist of the central agency, provincial agencies, municipal or district agencies, and school administrators (or principals), in addition to teachers. Suo (2014) unveiled a threefold structure involving the

national government, local governments, and kindergarten-level administration for enacting a curriculum reform in China. What was proposed by Liu and Teddlie (2003) and Suo (2014) align with the five sources of stakeholders from Schmidt et al. (2001).

China employs a top-down system for decision-making, in which the educational administration is powerful. Hence we would want to account for the interaction between teachers and the educational administration. According to UNESCO (2014), in a typical top-down system, teachers' agency can be impacted by the educational administration in four aspects: 1) teacher recruitment, 2) teacher training, 3) teacher allocation, and 4) teacher retention. Meanwhile, Schmidt et al. (2001) identified four possible roles in curriculum reforms: 1) "no formal role in curricular decision making," 2) "giving advice and making recommendations about curricular decisions," 3) "constraining, vetoing, or modifying recommendations about curricular decisions," and 4) "having final authority or approval of curricular decisions." These existing frameworks offer thoughts on what roles teachers could play amid the dynamics with the administration.

3. Teachers' Roles on the Implemented Curriculum

In this section, we peeked into teachers' roles in the design and implementation of *goals for children, instructional contents, instructional methods, and evaluation* as part of early childhood curriculum reforms. These components were operationalized as key elements of Implemented Curriculum from Schmidt et al. (1997), which was introduced before.

In terms of **goals for children**, three types of goals exist in China's curriculum reforms, namely educational goals, curricular goals, and teaching goals (Chen, 2009; Li, 2001). A lack of clear knowledge of their distinctions has left teachers in confusion (Li, 2001). Recent *educational goals* for early childhood development were specified in the Guidelines for Learning and Development of Children Aged 3-6 (Ministry of Education, 2012). They detailed the expectations

of what children aged 3-4, 4-5, and 5-6 should know and be able to do, having clarified different capacity levels for child development in physical health, language, socialization, science, and arts. According to the literature to date, there was a lack of information about teachers' roles in shaping the overarching educational goals.

Curricular goals, in contrast, are specific to each lesson that early childhood teachers would implement for an intended curriculum, often established by teacher groups. They are usually associated with educational goals and are vital to achieving the latter. In China's context, teachers can freely contribute their ideas to the design of curricular goals as part of a work routine. *Teaching goals* are more geared towards what to be taught, which early childhood teachers can shape directly in their lesson planning. Built upon each teacher's unique understanding of the contents to be covered in a class for a specific student group, these goals can elucidate the expected outcomes from each teaching activity, and prepare teachers for the step-by-step curriculum implementation. In China, early childhood teachers can freely design their teaching goals anytime before the start of their teaching (Chen, 2009).

There were concerns over the mismatch between the teaching goals and the educational or curricular goals, however. It might be attributed to teachers' limited participation when educational or curricular goals were designed. According to Liu (2007), many teachers' interpretations of policy documents were very different from scholars' or kindergarten managers' interpretations when it came to educational goals. This situation suggested that the implemented curriculum could be a distorted version of the intended curriculum, for teachers were having mixed understandings of the educational goals that formed the basis of curricular and teaching goals.

In terms of **instructional content**, the existing literature reflected teachers' limited involvement. Teachers do not have much say in *textbook selection* because of the strict hierarchy

in the decision process in kindergartens. According to Suo (2014), kindergartens today were administering textbook selection through a threefold structure. First, the national government offered general guidance on what textbooks should be selected. Second, the local governments (e.g., governments in a province or city) designed or designated a set of textbooks to be used for kindergartens in the areas in their charge. Third, each kindergarten selected textbooks from the list of textbooks authorized by the local governments. This threefold structure combined national regulation with kindergarten-level administration, aiming to embrace more flexibility or autonomy with the choice of textbooks for early childhood education. Meanwhile, many kindergartens were found struggling when introducing textbooks trending in the market without the necessary scrutiny from early childhood teachers or the adaptation given children's needs.

It is worth noting that, for many kindergartens in China, the actual instructional contents in classroom teaching tended to overlap with that in early grades of primary schools. For instance, many early childhood teachers were teaching children to read, write, and recite Chinese characters and classics, do arithmetical deductions with two- or three-digit numbers, and learn basic English words. These contents were expected to be covered in Grade 1 in primary school (Qi, 2011). Partly due to the burden associated with such above-grade content, many children were found deprived of playtime and turned to dislike study (Suo, 2014). Although many early childhood teachers were aware of this problem, there was not much room for them to make a change, and they were often pushed to join this above-grade pursuit as the competition for getting into selective primary schools was getting intense (Yao, 2017)—in this situation, children, their guardians, teachers, and administrators in kindergartens were all under pressure (Su, 2012).

In **instructional methods**, early childhood teachers in China were found able to alter the way they teach through lesson planning and classroom teaching, exerting a powerful role as a

changer in the instructional process. In addition, they were conscious of this power and were proactively seeking to maximize their agency in this regard. According to Chen (2009), some teachers in the interviews claimed that it was important to diversify their teaching strategies, changing instructional methods periodically to attract children's attention and help them learn more effectively. According to Dong (2020), most (82.8%) of the surveyed teachers had received training in instructional methods, and the majority (69.2%) mentioned that they most desired to learn about instructional methods in their training programs.

A mismatch was found between early childhood teachers' beliefs about instructional methods and their actual instructional practice, however. While many teachers in China claimed that they accepted many novel teaching approaches (introduced via curriculum reforms), their instructional practice did not demonstrate an alignment with them. According to Pan and Liu (2008), for instance, nearly 40 percent of the teachers surveyed did not use children's play effectively, whereas these teachers highly recognized the positive impact of children's play on their development. According to Li et al. (2011), many teachers in the survey indicated their preference for non-lecture methods, whereas their instructional methods were heavily concentrated on lectures. This dichotomy implied a gap between teachers' practice and their knowledge about instructional methods, which might impede the further improvement of curriculum reforms.

In **evaluation**, over the past several years, examinations, as part of the evaluation scheme for kindergarten children, had been existing in China's kindergartens. No national or regional documents stipulated these examinations or child performance standards at the early childhood stage, and yet they existed. This situation got worsened as many selective primary schools required entrance examinations (Zhang, 2016). These examinations directly supported the evaluation of children's academic growth, but they were not necessarily helpful for children's long-term growth

as they were aligned with the above-grade instructional contents and pedagogical methods, normally for primary school students (Sun, 2014). There was a shortage of literature concerning early childhood teachers' participation in the arrangement of such examinations. When it came to the appraisal of teachers for accountability, the educational administration in many regions was found over-emphasizing performance management. Such a mechanism had rendered stressful competitions among teachers, making it hard to seek collegial rapport or professional support for them to grow and better support curriculum reforms (Cao & Li, 2011).

4. Teachers' Relation with Educational Administration

Considering the rather dominant power of the educational administration in China's curriculum reforms, we explored to what extent teachers can make a difference. Reckoning on UNESCO's (2014) framework, which was described before, we explored teachers' roles amid the educational administration's recruitment, training, allocation, and retention processes when preparing for early childhood curriculum reforms.

In **recruitment**, the national government's robust teacher recruitment programs had greatly alleviated the long-existing early childhood teacher shortage problem (e.g., Wang et al., 2014), although there were regional disparities and this teacher shortage problem still existed and may have turned worse in certain geographic areas in China. That said, individual teachers, in general, did not have a voice in the top-down process to orchestrate the recruitment strategies affecting them directly. From 2010-2018, at an unprecedented speed, the number of kindergartens increased by 77.3%, and the number of early childhood teachers and staff increased by 145% across the country (Chen, 2019). Meanwhile, according to statistics from UNESCO-UIS (n.d.a.), improvement was made in terms of increasing the number of teachers and reducing class sizes. It was supported by the evidence that China's early childhood pupil-teacher ratio on average shrunk

to 17.4:1 from 22.3:1 in 2013-2018. Nonetheless, again, there were regional disparities, and the nationwide statistics did not reflect the realities in China's certain regions. For example, in Chongqing City, the average early childhood pupil-teacher ratio was 38:1 in 2017, about twice the national average, suggesting grave teacher shortage problems (Yang & Wang, 2017). Attributed to the recent "universal two-child policy" (Zeng & Hesketh, 2016), Beijing embraced an increase of new births, and consequently a shortage of kindergartens and early childhood teachers; the Beijing municipal government established new kindergartens in collaboration with local primary schools and turned part of the public space into the infrastructure of kindergartens (People's Daily, 2016).

UNESCO-UIS (n.d.b., n.d.c.) defined "qualified teachers" as individuals with the minimum qualifications to teach at a specific education level. It is worth noting that, China's educational administration retained the final authority over the recruitment of teachers to ensure the quality of teachers aligns with the demand for curriculum reforms, and yet so far it had not established official professional standards regarding the quality of early childhood teachers to be recruited. In this situation, it was not surprising that many of China's early childhood teachers were found unqualified even when they had been certified to teach children. Many early childhood teachers were often complained about by parents and kindergarten managers due to their limited qualifications (Kong & Wang, 2016). Studies in provincial and local contexts showed that the certified teachers may have had limited knowledge structure or appreciation of diversity (Wang, 2017), lacked ethics or integrity (Huang, 2018), or were not equipped with satisfactory teaching skills (Tong & Zhu, 2018). The Professional Standards for Early Childhood Teachers, released in 2011 (Ministry of Education, 2011a), helped clarify the qualification for supporting teacher recruitment, but this document itself was not enough to meet the needs of the official, minimum

requirements in teacher recruitment, which meant a gap that must be bridged soon (Guo et al., 2014). The good news was that the educational administration released in 2018 the Act on Early childhood teachers' Unethical Behaviors (Ministry of Education, 2018a) and Ten Principles for Professionalism of Early Childhood Teachers in the New Era (Ministry of Education, 2018b), laying the groundwork for formal quality standards when recruiting early childhood teachers.

In **training**, the educational administration carried a formal role in curriculum-related decision-making by influencing teachers via teacher training programs. For both pre- and in-service early childhood teachers, China's educational administration had established and enforced national standards about teacher training that aligned with curriculum reforms. In this regard, early childhood teachers as a group did not have a formal role in curricular decision-making that undergirds such training. In the pre-service training, A minimum educational background and a minimum professional qualification were stipulated to be met by pre-service teachers before they started their teaching career. Mandated by China's Law for Teachers (National People's Congress, 1993), pre-service teachers must complete lower secondary or vocational early childhood education training before starting work with children aged 3-7 years. The teaching certification was seen as the minimum professional qualification for early childhood teachers (Xinhua Net, 2018). As for the in-service training, the educational administration delivered it through a system established at the provincial, municipal, and county levels in collaboration with local kindergartens. This in-service training led teachers to periodically exchange information and learn from each other through a network for activities including field visits, peer observation, competitions for best teaching performance, and kindergarten-based research (Zhao, 2012).

Apart from its merits, recent research unveiled at least three problems with the current teacher training system. First, the minimum standards established decades ago for teachers in pre-

and in-service training needed to be enhanced. Given the fact that higher education had nearly been popularized in China, the minimum education qualification required for early childhood teachers need to be lifted to attract qualified candidates (Wang et al., 2014; Chi & Li, 2019). Second, in-service training opportunities were in shortage. While the educational administration had established a national training plan for in-service early childhood teachers (Ministry of Education, 2011b), there were regional disparities. According to recent survey findings from the Dongguan City of Guangdong Province, the majority (around 75%) of the teachers did not think they had been provided with enough chances for training (Liu, 2020a). Third, the quality of the training services was in doubt. Some teachers asserted that the training courses did not help them practice what they had learned in the classroom settings (Liu, 2020a). It appeared that there was much room for the educational administration's further improvement in teacher training service provision, in relation to the dynamics involved in curriculum reforms.

In **allocation**, similarly, the educational administration retained the final authority throughout actions or decisions to systemize and streamline resources in the preparation of early childhood teachers for curriculum reforms. There was a huge gap between China's urban and rural areas in both the quantity and quality of early childhood teachers, which can affect the consistency of the delivery of curriculum reform across the nation. Bridging this gap and ensuring consistency in the regional alignment with the mandates of curricular decisions remained a pledge of the educational administration in China. In terms of quantity, while China's rural areas witnessed a huge increase in the number of kindergartens, around 4,000 rural towns across China still did not have a public kindergarten, and the gross enrollment rate in some areas remained below 50% in the early childhood stage (Chen, 2019). The low enrollment rate could be partly attributed to the lack of kindergarten sources including early childhood teachers, which could be further explained

by the lack of willingness: Most college graduates or new teachers to kindergarten were found unwilling to teach in rural areas (Wu & Qin, 2015), partly due to the enormous rural-urban gap in socioeconomic resources (Kidwai et al., 2016).

As for the quality of teachers, it was normally difficult to ensure the quality of early childhood teachers in rural areas plagued by teacher shortages (Tang & Wu, 2018; Chen, 2016). According to a recent survey of 600 rural early childhood teachers, for example, only around 30% of them had received relevant training in early childhood education, 22% completed advanced education beyond the 2-/3-year technical college training specialized in early childhood education, and the majority had completed technical secondary school only (Yang, 2017). In contrast, according to a survey of 300 early childhood teachers from a city, the majority (accounting for 75.8%) had completed the 2-/3-year technical college, 4-year university, or above (Zhang, 2020).

Moreover, there was a gap between private and public kindergartens. Private kindergartens in general were suffering from a shortage of qualified teachers, as its proportion of teachers having not been certified to teach was much larger than in public ones (Liang et al., 2014; Wang et al., 2014). Albeit with a vision to transform private kindergartens into service-driven ones at affordable prices to the common people, the educational administration had not yet established a complete set of policies and financial support systems for improving teachers' qualifications in private kindergartens (Liu, 2020b).

In **retention**, the educational administration reserved the final approval of decisions that affect a curriculum reform, instead of teachers. A poor retention rate suggests a lack of stability of the teacher workforce and hence low viability of a new curricular mission. The retention of early childhood teachers was not promising in China, which can hold back curriculum reform. Not many research articles had been published on teacher retention until 2010, and there was lesser literature

on the urban-rural gap in the retention of teachers (Li & Gong, 2019). Results from the following two surveys were noteworthy. One survey was on 121 teachers from a city in Henan Province, reporting that 46.8% of the early childhood teachers had shifted their jobs (He, 2013). The other was on 649 early childhood teachers from four provinces, reporting that 23.6% of the surveyed teachers had planned to work in a different kindergarten, and 24.1% had planned to shift their job (Du et al., 2013). These statistics demonstrated bleak circumstances when it came to retaining early childhood teachers.

Existing research pointed out several factors that might explain the retention issues. First, there was a salary gap both between kindergartens and between education levels. The between-kindergarten salary difference was found associated with the mobility of teachers from one kindergarten to another, and the between-profession salary difference was found associated with teachers' shift to a new profession (Du et al., 2013). For instance, early childhood teachers' salaries were lower than primary or secondary school teachers', and this disparity had aroused broad dissatisfaction among early childhood teachers (Liang et al., 2014). Second, China's staff quota system established by the educational administration limited the remunerations to certain teachers. This system mandated the maximum number of teachers each kindergarten could be hired with government-supported job security and other benefits (Han et al., 2010; Xia, 2014). That was to say, in-service early childhood teachers were not treated equally as many of them did not have the same job security or the equivalent remunerations as their peers that were already in this quota system. By the end of 2018, the teachers in this quota system accounted for 46% of the total number of teachers in public kindergartens across China (Chen, 2019), although this proportion was much lower than that in the past once up to 72% (Zhang, 2010). The in-service early childhood teachers were more likely to shift their workplace or profession in search of better opportunities (Zhang,

2016).

5. Discussion

In China's case, early childhood teachers today had been given much more powerful roles than in the recent past, but there was room for improvement, as in many other countries. Compared to an existing overview of China's progress, problems, and possible resolutions in early childhood development from Chi and Velez (2017), this review study took a deeper dive into early childhood teachers' situation amid China's curriculum reforms. Overall, we found that China's early childhood teachers had a direct impact on curriculum reforms, partly exemplified by their engagement in shaping the curriculum in the actual teaching practice. This finding contradicted Cao (2020) who claimed China's early childhood teachers on average had had little involvement in the design of instructional content and methods. Specifically, we found early childhood teachers had advisory roles in establishing curricular goals and final authority on the teaching goals, and in the textbook selection or actual contents to be covered in class. Concerning instructional methods, teachers were found possessing final authority over the instructional methods employed in classroom teaching. As for the roles in examinations, we were not able to comment on this regard due to the meager existing information.

Meanwhile, however, China's early childhood teachers were found functioning within certain limits that could have been enhanced with more support from the educational administration. Early childhood teachers were identified with a lack of a formal role in setting up educational goals, which were normally established via national guidelines; in the selection of instructional content, in which the educational administration and social beliefs (e.g., expectation to prepare children early on for primary school study) were powerful. Also, their limitations in knowledge, experience, or attitudes may have kept them from fully contributing to curriculum

reforms. In this aspect, however, in a top-down system, the education administration could have invested more in teacher training to help early childhood teachers gain more capacity that could let them contribute more. Regarding the overarching policies for training, recruiting, allocating, and retaining teachers, considering that the educational administration retained the final authority, the administration could have taken more responsibilities to fix institution- or system-wide issues and empower early childhood teachers.

We concede that there were some limitations to this review. First, this work was limited to the existing research on the *relatively stable* status quo of China's early childhood education, not involving some *rapidly changing* factors such as the private sector that offers early childhood teacher training and education in recent years. Second, while social beliefs in the form of parents' expectations were found to be an important factor behind early childhood curriculum reforms, our review did not cover much about this part given the scarce literature about it.

Future research to further explore teachers' roles in curriculum reforms could go in multiple directions. For example, how social beliefs may weigh in during early childhood curriculum reforms and their implications on teachers' roles were understudied. Also, how parents, private companies or other parties involved in early childhood teacher training had affected teachers' roles in early childhood curriculum reforms could be promising to unveil a more complete landscape of the reform dynamics. Furthermore, our review showed that, despite a mammoth governmental investment in training for millions of early childhood teachers, recent surveys demonstrated that many teachers were not implementing what they had learned or agreed on in their practice. This situation is worth further investigation with impactful questions like "how effective the government-led teacher training programs have been," "how to define the effectiveness of teacher training programs," and "how teacher training programs could be

improved.”

References

- Cai, H. (2005). 20 shiji woguo you'eryuan kecheng gaige de lishi huigu [A reflection on the history of China's curriculum reforms in kindergartens in the 20th century]. *Journal of Nanjing Xiaozhuang College*, 21(2), 71–74.
- Cao, T. (2020). “Cong jiao dao xue” yu jiaoshi zhiye de beilun [The paradox between “from teaching to learning” and the teacher profession]. *Jiaoshi Fazhan Yanjiu* [Teacher Development Research], 2020(2), 67–73.
- Cao, T., & Li, F. (2011). Jixiao gongzi zhidu xia xinren jiaoshi zhuanye fazhan de kunjing yu tupo [Dilemma and breakthroughs of teacher development in the performance management system]. *Jiaoyu Fazhan Yanjiu* [Research on Educational Development], 2011(10), 1–5.
- Central Government of People's Republic of China. (2010). *Guojia zhongchangqi jiaoyu gaige he fazhan guihua gangyang (2010-2020 nian)* [National Outline for Medium- and Long-term Education Reform and Development (2010-2020)]. Retrieved on January 3, 2021 from http://www.gov.cn/jrzg/2010-07/29/content_1667143.htm
- Central Government of People's Republic of China. (2018). *Zhonggong zhongyang guowuyuan guanyu quanmian shenhua xinshidai jiaoshi duiwu jianshe gaige de yijian* [CCP Central Government and National Congress's Suggestions on Holistically Deepening Reforms to Innovate the Teacher Workforce in the New Era]. Retrieved on January 3, 2021 from http://www.gov.cn/zhengce/2018-01/31/content_5262659.htm
- Chen, B. (2019, August 22). *Guowuyuan guanyu xueqian jiaoyu shiye gaige he fazhan qingkuang de baogao* [State Council's report on reforms and development in early childhood education]. Retrieved on October 25, 2020 from

- <http://www.npc.gov.cn/npc/c30834/201908/1c9ebb56d55e43cab6e5ba08d0c3b28c.shtml>
- Chen, R. (2009). *You'eryuan jiaoshi kecheng juece de ge'an yanjiu* [A case study on early childhood teachers' curriculum decision-making] (Doctoral dissertation). Retrieved on October 25, 2020 from <http://cdmd.cnki.com.cn/Article/CDMD-10200-2009160616.htm>
- Chi, J., & Li, N. (2019). Woguo you'eryuan jiaoshi duiwu jianshe zhong de zige ji renyong zhidu tantao [Discussion on the certification and recruitment systems in China's kindergarten teacher development]. *Jiaoshi Fazhan Yanjiu* [Teacher Development Research], 3(4), 32–36.
- Chi, J., & Velez, E. (2017). Ertong zaoqi fazhan de touzi yu ganyu: Guoji de shizheng yiju [Investment and intervention in early childhood development: International empirical evidence]. *Jichu Jiaoyu* [Journal of Schooling Studies], 14(5), 11–22.
- Dong, Y. (2020). Xueqian jiaoshi peixun xianzhuang yu peixun xuqiu yanjiu [Research on the current status and the need of training for early childhood teachers]. *Kejiao Wenhui* [The Science Education Article Collects], 2020(4), 41–43.
- Du, P., Zhu, F., & Du, Y. (2013). You'er jiaoshi de liudong, liushi yu gongzi guanxi de yanjiu [Research on the mobility and the decrease of early childhood teachers and their relationship with teacher salaries]. *Jiaoyu Yu Jingji* [Education and Economics], 2013(6), 59–65.
- Guan, Q., & Meng, W. (2007). China's new national curriculum reform: Innovation, challenges and strategies. *Frontiers of Education in China*, 2, 579–604.
- Guo, T., Shuang, L., & Li, X. (2014). Guoneiwai you'er jiaoshi zhiye zhunru biao zhun jiqi qishi [Professional requirements for entry to the kindergarten teaching profession at home and abroad and their implications]. *Hunan Keji Daxue Xuebao* [Journal of Hunan University

- of Science & Technology], *17*(2), 175–180.
- Härkki, T., Vartiainen, H., Seitamaa-Hakkarainen, P., & Hakkarainen, K. (2020). Co-teaching in non-linear projects: A contextualised model of co-teaching to support educational change. *Teaching and Teacher Education*.
- He, L. (2013). Cong shizi junheng fazhan kan you'er jiaoshi liudong quxiang xianzhuang—yi henan sheng N shi you'er jiaoshi wei li [Research on the current moving trends of early childhood teachers--using the early childhood teachers in N City of Henan Province as an example]. *Zoaqi Jiaoyu: Jiaokeyan Ban* [Early Childhood Education: Version for Teaching and Research], *2013*(6), 42–44.
- He, X. (2015). Jianming zhongguo xueqian jiaoyu shi [A brief history of China's early childhood education]. Beijing: Beijing Normal University Press.
- Heckman, J., Moon, S., Pinto, R., Savelyev, P., & Yavitz, A. (2009). The rate of return to the high/scope Perry Preschool program. *Journal of Public Economics*, *94*(1–2), 114–128.
- Huang, F. (2004). Curriculum reform in contemporary China: Seven goals and six strategies, *Journal of Curriculum Studies*, *36*(1), 101–115.
- Huang, G. (2018). You'er jiaoshi shide shifan de yuanyin yu duiying celue [Reasons and resolutions of early childhood teachers' ethical problems]. *Jilin Sheng Jiaoyu Xueyuan Xuebao* [Journal of Educational Institute of Jilin Province], *2018*(7), 100–102.
- Huo, L. (2015). The centennial change from imitation to innovation: early childhood education and curriculum reform in China. In L. Huo, S. Neuman & A. Nanakida (Eds.), *Early childhood education in three cultures: China, Japan and the United States*. New York: Springer.
- Kidwai, H., Chen, D., & Liang, X. (2016). *China: Early childhood development. SABER country*

- report, 2016*. Washington, DC: World Bank. (ERIC Document Reproduction Service No. ED 594 965).
- Kong, L., & Wang, J. (2016). Fangzhi you'eryuan jiaoyu huodong xiaoxuehua qingxiang de guochengxing pingjia tixi goujian [Construction of process evaluation systems in prevention of the "primary-school orientation" in kindergartens]. *Yanbian Jiaoyu Xueyuan Xuebao* [Journal of Yanbian Education], 6(3), 121–124.
- Li, H., Wang, C., & Wong, J. (2011). Early childhood curriculum reform in China: perspectives from examining teachers' beliefs and practices in Chinese literacy teaching. *Chinese Education and Society*, 44(6), 5–23.
- Li, J. (2001). Guanyu you'eryuan kecheng de jige wenti: you'eryuan jiaoyu mubiao, kecheng mubiao jiqi kecheng moshi [Several questions about curriculums in kindergartens: educational goals, curricular goals, and curriculum models]. *Xueqian jiaoyu yanjiu* [Early childhood education research], 2001(1), 27–30.
- Li, R. (2009). Lun xinkegai you'er jiaoshi jueuse de zhuanbian [On the change of early childhood teachers' roles in new curriculum reforms]. *Zhongguo Jiaoyu Jishu Zhuangbei* [China's Educational Technological Equipment], 2009(3), 7–8.
- Liang, X., Fu, Y., & Zhang, Y. (2014). *Challenges and opportunities: Early childhood education in Yunnan*. Washington, DC: The World Bank.
- Liu, L. X. (2007). *Research on the effects of the education reform based on kindergarten class* (Unpublished doctoral dissertation). Beijing Normal University, Beijing.
- Liu, M. (2020a). You'er jiaoshi zhihou peixun xianzhuang, wenti yu duice yanjiu [Research on the current status, problems and resolutions in in-service early childhood teacher training]. *Kejiao Wenhui* [The Science Education Article Collects], 2020(5), 39–40.

- Liu, M. (2020b). Cangzhou shi minban you'eryuan puhuixing zhuanxing de wenti ji duice [Problems and resolutions in constructing private kindergartens for the public good in Cangzhou]. *Cangzhou Shifan Xueyuan Xuebao* [Journal of Cangzhou Normal University], 36(1), 126–129.
- Liu, S., & Teddlie, C. (2003). The ongoing development of teacher evaluation and curriculum reform in the People's Republic of China. *Journal of Personnel Evaluation in Education*, 17(3), 243–261.
- Ministry of Education. (2011a, December 12). *You'eryuan jiaoshi zhuanye biao zhun* [Professional standards for early childhood teachers]. Retrieved on October 25, 2020 from <http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s6127/201112/127838.html>
- Ministry of Education. (2011b, September 5). *Jiaoyubu caizhengbu guanyu shishi you'er jiaoshi guojiaji peixun jihua de tongzhi* [Announcement on implementing the national training plan for early childhood teachers from Ministry of Education and Ministry of Finance]. Retrieved on October 25, 2020 from http://www.moe.gov.cn/srcsite/A10/s7058/201109/t20110905_146630.html
- Ministry of Education. (2012). *3-6 sui ertong xuexi yu fazhan zhinan* [Guidelines for Learning and Development of Children Aged 3-6]. Retrieved on October 25, 2020 from <http://www.moe.gov.cn/ewebeditor/uploadfile/2012/10/15/20121015120541355.doc>
- Ministry of Education. (2017). *Educational statistical yearbook of China*. Beijing: People's Education Press.
- Ministry of Education. (2018a, November 14). *Jiaoyubu guanyu yinfa you'eryuan jiaoshi weifan zhiye daode xingwei chuli banfa de tongzhi* [Announcement from MOE on the Act on

- Early childhood teachers' Unethical Behaviors]. Retrieved on October 25, 2020 from http://www.moe.gov.cn/srcsite/A10/s7002/201811/t20181115_354925.html
- Ministry of Education. (2018b, November 14). *Jioayubu guanyu yinfa xinshidai gaoxiao jiaoshi zhiye xingwei shixiang zhunze, xinshidai zhongxiaoxue jiaoshi zhiye xingwei shixiang zhunze, xinshidai you'eryuan jiaoshi zhiye xingwei shixiang zhunze de tongzhi* [Announcement from MOE on the Ten Principles for Professionalism of University Instructors in the New Era, Ten Principles for Professionalism of Primary and Secondary School Teachers in the New Era, and Ten Principles for Professionalism of Early childhood teachers in the New Era]. Retrieved on October 25, 2020 from http://www.moe.gov.cn/srcsite/A10/s7002/201811/t20181115_354921.html
- Mok, K., & Ngok, K. (2008). One country, diverse systems: Politics of educational decentralization and challenges for the regulatory state in Post-Mao China. *The China Review*, 8(2), 169–199.
- Madaus, G. F., & Kellaghan, T. (1992). Curriculum evaluation and assessment. In P. W. Jackson (Ed.), *Handbook of research on curriculum*. New York, NY: Macmillan Publishing Company.
- National People's Congress. (1993). *Zhonghua renmin gongheguo jiaoshi fa* [Law for teachers in People's Republic of China]. Retrieved on October 25, 2020 from http://www.npc.gov.cn/wxzl/wxzl/2000-12/05/content_4603.htm
- People's Daily. (2016, November 10). *Beijing jiang zhichi xiaoxue kaiban fushu you'eryuan huanjie xueqian jiaoyu ziyuan jinzhang* [Beijing will support primary schools to establish kindergartens to alleviate the shortage of resources for early childhood education]. Retrieved on October 25, 2020 from <http://bj.people.com.cn/n2/2016/1110/c82840-29284525.html>

- Qi, X. (2011, September 8). "Xiaoxue hua" touzhi tongnian ["Primary-school-like" kindergartens overdraw childhood]. *Guangming Ribao* [Light Daily]. Retrieved on October 25, 2020 from http://epaper.gmw.cn/gmrb/html/2011-09/08/nw.D110000gmrb_20110908_2-05.htm
- Schmidt, W. H., McKnight, C. C., Houang, R. T., Wang, H., Wiley, D. E., Cogan, L. S., & Wolfe, R. G. (2001). *Why school matter: a cross-national comparison of curriculum and learning*. San Francisco, CA: Jossey-Bass.
- Su, L. (2012, January 7). Zhanduan you'eryuan "xingqu ban" liyilian [Revoke the profit chain in kindergartens' "specialty classes"]. *Zhongguo Jiaoyu Bao* [Chinese Education Newspaper]. Retrieved on October 25, 2020 from <http://edu.people.com.cn/h/2012/0107/c227696-3776583636.html?prolongation=1>
- Sun, J. (2014). Xueqian jiaoyu xiaoxuehua qingxiang weihai ji jiejuce duice [Consequences and resolutions of "primary-school orientation" in early childhood education]. *Xue Zhou Kan* [Learning Daily], 9(12), 130.
- Suo, C. (2014). *You'eryuan jiaoshi wenhua yanjiu* [Study on early childhood teachers' culture] (Doctoral dissertation). Retrieved on October 25, 2020 from <http://gb.oversea.cnki.net/KCMS/detail/detailall.aspx?filename=1015522682.nh&dbcode=CDFD&dbname=CDFDREF>
- Tang, S. (1970). *You'eryuan kecheng jiben lilun he zhengti gaige* [Fundamental theories and holistic reforms of curriculums in kindergartens]. Nanjing, Jiangsu: Nanjing Normal University Press.
- Tang, Y., & Wu, Z. (2018). Nongcun you'eryuan jiaoshi zige zhunru de jiazhi kunjing yu zhidu xuanze [Value dilemma and policy design in the qualification entry scheme for rural early childhood teachers]. *Xiandai Jiaoyu Guanli* [Modern Educational Management],

2018(11), 94–97.

Tong, Z., & Zhu, L. (2018). Guanyu xianxing you'eryuan jiaoshi zhunru wenti de sikao—yi jiangsu sheng weili [Reflection on problems in admitting early childhood teachers: A case with Jiangsu Province]. *Jiangsu Jiaoyu Yanjiu* [Jiangsu Education Research], 2018(Z1), 49–52.

UNESCO, UNICEF, World Bank, UNFPA, UNDP, UNWomen, & UNHCR. (2016). *Education 2030: Incheon declaration*. Retrieved November 27, 2020 from <https://unesdoc.unesco.org/ark:/48223/pf0000245656>

UNESCO. (2014). *Teaching and learning: achieving quality for all*. Paris, France: The United Nations Educational, Scientific, and Cultural Organization.

UNESCO-IBE. (n.d.a). *Curriculum change—Activity 1: change to improve quality*. Retrieved on October 25, 2020 from http://www.ibe.unesco.org/fileadmin/user_upload/COPs/Pages_documents/Resource_Packs/TTC/D/sitemap/Module_1/Module_1_1_concept-.html

UNESCO-IBE. (n.d.b). *Curriculum design—Activity 1: the structure of a curriculum framework*. Retrieved on October 25, 2020 from http://www.ibe.unesco.org/fileadmin/user_upload/COPs/Pages_documents/Resource_Packs/TTCD/sitemap/Module_3/Module_3_1_concept.html

UNESCO-UIS. (n.d.a). *Education: Pupil-teacher ratio by level of education (headcount basis)*. Retrieved on October 25, 2020 from <http://data.uis.unesco.org/>

UNESCO-UIS. (n.d.b). *Education: Percentage of qualified teachers by level of education (headcount basis)*. Retrieved on October 25, 2020 from <http://data.uis.unesco.org/>

UNESCO-UIS. (n.d.c). *Education: Pupil/qualified teacher ratio by level of education (headcount basis)*. Retrieved on October 25, 2020 from <http://data.uis.unesco.org/>

- Wang, C., Guo, Y., & Wu, X. (2014). Xinxingshi xia jiaqiang you'eryuan jiaoshi duiwu jianshe de duice sikao [On the construction of early childhood teachers under the new situation]. *Xueqian Jiaoyu Yanjiu* [Studies in Early Childhood Education], 2014(2), 27–32.
- Wang, F. (2017). You'er jiaoshi duiwu jianshe yanjiu [Research on the development of early childhood teachers]. *Zhongguo Xiaowai Jiaoyu* [China's Education Outside Schools], 2017(28), 143–145.
- World Bank. (2015, May 11). *Increased investment in early childhood critical for development and inclusion in the Arab world*. Retrieved on October 25, 2020 from <http://www.worldbank.org/en/news/feature/2015/05/11/increased-investment-in-early-childhood-critical-for-development-and-inclusion-in-the-arab-world>
- Wu, Z., & Qin, Y. (2015). *Zhongguo nongcun jiaoyu fazhan baogao 2013-2014*. Beijing: Beijing Normal University Press.
- Wright, C. D. (2011, May 27). Early childhood development: an essential building block [Web log comment]. Retrieved on October 25, 2020 from <http://blogs.worldbank.org/arabvoices/early-childhood-development-essential-building-block>
- Xia, J. (2014). Woguo nongcun you'eryuan shizi duiwu jianshe jingyan jiqi qishi [Experience and measures of rural early childhood teachers' development]. *Xueqian Jiaoyu Yanjiu* [Studies in Early Childhood Education], 2014(7), 35–41.
- Xinhua Net. (2018). *Zhonggong zhongyang guowuyuan guanyu xueqian jiaoyu shenhua gaige guifan fazhan de ruogan yijian* [Opinions on the regulation and further development of early childhood education from CCP and National Congress]. Retrieved on October 25, 2020 from http://www.xinhuanet.com/politics/2018-11/15/c_1123720031.htm
- Yang, M., & Wang, C. (2017). 2017 nian xueqian jiaoyu zhuan ye rencai xuqiu qingkuang diaoyan baogao [Research report on the demand of talents for early childhood education in 2017]. *Jiucheng Jiaoyu* [Liquor City Education], 2017(3), 37–40.

- Yao, X. (2017). Jiuzheng you'eryuan xiaoxuehua qingxiang de shijian fenxi [Analysis of the practice to correct the "primary-school orientation" in kindergartens]. *Duyuxie Zazhi* [Read and Write Periodical], 14(4), 257.
- Young, M. (2002). Introduction and overview. In M. Young (Ed.), *From early child development to human development* (pp. 1-19). Washington, DC: The World Bank.
- Zeng, Y., & Hesketh, T. (2016). The effects of China's universal two-child policy. *The Lancet*, 388(10054), 15–21.
- Zhang, C. (2016). You'er jiaoshi liudong yu you'eryuan jiaoshi guanli de xiangguan yanjiu [Research on the teacher mobility and teacher management in kindergartens]. *Yatai Jiaoyu* [Education in Asia Pacific], 2016(26), 152.
- Zhang, C. (2020). Minban you'eryuan jiaoshi shengrenli xianzhuang yu tisheng celue yanjiu [Research on the current status and the development strategies of teachers' capabilities in private kindergartens]. *Guangzhou Guangbo Dianshi Daxue Xuebao* [Journal of Guangzhou Open University], 20(2), 36–41.
- Zhang, L. (2016). Jiuzheng you'eryuan jiaoyu xiaoxuehua qingxiang celue yanjiu [Research on strategies to correct the "primary-school orientation" in kindergartens]. *Zhongguo Xiaowai Jiaoyu* [China's Education Outside Schools], 2(5), 145.
- Zhao, M. (2012). Teacher learning through teaching reflection in the context of curriculum reform. In H. Yin & J. C. Lee (Eds.), *Curriculum Reform in China* (pp. 226-235). New York: Nova Science Publishers, Inc.
- Zhu, J. (2002, December). *Early childhood care and education in P.R. of China*. Paper presented at 2002 KEDI-UNESCO Bangkok Joint Seminar and Study Tour on Early Childhood Care and Education, Seoul, Korea.

Zhu, J. (2009). Early childhood education and relative policies in China. *International Journal of Child Care and Education Policy*, 3(1), 51–60.

Table 1

Four Stages of China's Early Childhood Curriculum Reforms

Stages & Historical Events	Curricular features	Official documents
Stage One, started off with the Sino-Japanese War in 1895	The first early childhood education institution in China was established in 1903, following a Japanese model (He, 2015).	The <i>Official School Regulations on Meng Yang Yuan and Home Education</i> , issued by the Qing government in 1904, was the first sign of the governmental regulation in early childhood education.
Stage Two, embarked on with the "May Fourth Movement" in 1919	The curricular models from U.S. and European countries turned popular in China, while Chinese educators like Heqin Chen and Xuemen Zhang were adapting the western frameworks to China's unique contexts and had established novel colleges to pilot the "unit-instruction" curriculum.	The <i>Curriculum Standards for Kindergartens</i> , endorsed by the Kuomintang government in 1932, established a relatively complete and independent early childhood curriculum that fits with China, built on Chen and Zhang's work (Tang, 1970).
Stage Three, marked by the establishment of the People's Republic of China in 1949	Curricular theories of Soviet educators fundamentally rebuilt China's curriculum into one that emphasized children's all-round development with a holistic knowledge system (Huo, 2015).	The <i>Temporary Instruction Outline for Kindergartens (Draft)</i> , which recognized the separate teaching for each subject while negating the "unit-instruction" curriculum (Cai, 2005) was released in 1952 by the People's Republic of China.
Stage Four, flagged by the endorsement of the "reform and opening up" policy in 1978	China's early childhood education researchers and practitioners reflected on China's past in early childhood education while embracing foreign models (Wang, 2003). The curriculum reforms experimented with the separate-subject curriculum and the holistic curriculum, from bottom to top, across different regions of the country (Cai, 2005).	The <i>Outline for Education in Kindergartens (Trial Draft)</i> was issued in 1981; the <i>Working Standards for Kindergartens</i> in 1996 and <i>Educational Guidelines for Kindergartens</i> in 2001 recognized the reform endeavors from across the country that feature a variety of curricular models (He, 2015).