



Chinese School Principals Create an Equity-Based Learning Community in Leading School Improvement for Secondary High School Student Achievement

BY

^{1*}Wei Zhang, ²Tetyana Koshmanova

¹Teaching, Learning and Educational Studies, College of Education and Human Development, Western Michigan University

²Teaching, Learning, and Educational Studies. Western Michigan University



Abstract

School principals play a significant role in any equity and justice initiatives to assist teachers in establishing positive expectations for students. This study explores Chinese secondary school principals' experiences in building an equitable educational environment for student academic achievement. The descriptive qualitative inquiry was employed to navigate principals' views for building equity in school through semi-structural protocol interviews with a total of twelve principals (N=12). Findings show that Chinese school principals face three challenges: passing testing scores first, but equity second; disengagement between school principals and students, parents, and teachers; insufficient resources. This study found that principals responded to the challenges by promoting education core values, such as equity; engaging with students, parents, and teachers; and seeking support from superintendents, partners, and school founders. Findings also show that principals use three strategies: a dialogue between school stakeholders; building a school fair evaluation system; having cooperative projects for school improvement. Future studies of fostering anti-racial leaders were recommended.

Keywords: principals, equal education, academic achievement, high schools, qualitative research

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Introduction

With the ongoing improvement of the Chinese economy, family per capita, educational policy, and globalization, Chinese school principals are required by policy, regulation, legislation, and democratic discourse to promote equitable outcomes for students (Honing & Konsa, 2020; Authors, 2021). Equity in education means that principals need to raise student achievement and narrow the gaps between the highest and lowest-performing students (Kim, 2020). Also, principals need to eliminate racial disproportionality. School principals can enhance equity in four domains: curriculum interpretation, instructional practices, assessment and evaluation, and community involvement (Ross & Berger, 2009; Trujillo, Moller, Jensen, Kissell, & Larsen, 2021; Authors, 2020). Liou and Liang (2021) pointed out that school principals play a significant role in any equity and justice initiatives to assist teachers in establishing positive expectations for students. They also said that school principals are often called on to nurture cultures of expectations that sustain innovation, responsiveness, and equity in education (Romero & Krichesky, 2018; Szeto, 2020).

Hallinger and Liu (2016) further indicated that school principals need to deal with the gap in terms of the school's urban and rural income ratio. Szeto and Cheng (2017) pointed out that school principals need to foster equality in learning development for a diverse student population and practice addressing social-justice issues in school. Donaldson, Mavrogordato, Youngs, Dougherty, and Ghanem (2021) said that school districts face a long conflicting for equity in education. Their studies found that school principals face equity in evaluation in school, and they said that they serve a disproportionate number of students of color and students from low-income families (Donaldson et al., 2021; Authors, 2020). That is why we define equity as an approach to practice that counters oppressive systems, policies, structures, and procedures that create or exacerbate disparities in education for nondominant students (Authors, 2020).

Equity in education is essential for school principals to work with teachers, parents, and students to deliver high-quality education in the school. They face many challenges if they want to promote equity in China's top-down high-power

distance school contexts (Authors, 2020). Oplatka and Arar (2016) pointed out that school principals in traditional societies are unlikely to be critical activists who deconstruct political, social, and economic inequity and organize school and community resources towards the central aim of providing opportunities for traditionally underrepresented and oppressed people. This situation is not only because these activities are in stark contrast with major features of traditional society but also due to the difficulty of leading critical, evocative thinking and dialogue in a society that expects its members to follow entrenched values and norms (Authors, 2020). Skrla, Scheurich, Garcia, and Nolly (2004) confirmed that school principals might be aware of inequities in various aspects of their schools. Still, they rarely have systematically examined these areas and then devised ways to eliminate the disparities.

These viewings indicated that school principals face the challenges of community racial and ethnic inequities to implement school safety and equity, such as the disorder, violence, crime, and injustice in the community (Peguero, Irizarry, Iwama, Dunning-Lozano, Hong, & King, 2021; Authors, 2021)). Litz, Hourani, and Scott (2020) said the top-down school system caused injustice and pointed out that school principals need to stipulate educational equity, collaboration, partnerships, and open communications among stakeholders.

Therefore, this study aims to explore the Chinese high school principals build an equitable educational learning environment for student achievement in China. Primarily, this study is to answer the central question of how Chinese school principals understand and interpret their meaningful experiences of creating an equitable educational environment for student achievement in the private school context. Since this study explores the Chinese school principals' viewing in building a fair educational environment in school, I reviewed the previous literature that I found only a few studies that mentioned equity in the paper and documents for Chinese school principals. There have been a few studies to discuss the importance of equity in education. However, there are no articles to discuss how Chinese school principals need to build an equitable educational environment in the private school secondary high school in China. Therefore, my study could fill in the gap in the literature as the western scholars to address those educators and policymakers need to explore the importance of creating an equitable education in school. Thus, the following three research questions are guided in this study to address the equity in teaching in China.

1. What are the challenges of the Chinese high school principals in building an equitable educational environment in private schools in China?
2. How do Chinese high school principals respond to the challenges in building an equitable educational environment for student achievement in teaching and learning in private schools in China?
3. What strategies do Chinese high school principals create for building an equitable learning

environment for student achievement and school sustainable growth in private schools in China?

Since the research questions are descriptive, we used the descriptive qualitative inquire by interviewing Chinese high school principals to answer the research questions. Besides, we also analyzed the documents, policies, and personal experience reflections to address the equity issues and provide better support for school principals in leading school improvement in China. We described the steps of collecting data and analyzing the data for answering the questions using descriptive and interpretative analysis.

Methodology

Research Design

The qualitative descriptive inquiry was employed to analyze and understand the school principals' experiences and explore their perceptions, opinions, beliefs, and values, such as equity in school (Creswell & Creswell, 2018). This study investigates the Chinese school principals' experiences in creating an equity educational environment in China's high-power distance school contexts. School principals need to know the importance of generating educational core values, such as equity, social justice, and equality between school stakeholders (Creswell, 2015). However, China's high-power distance school context causes school principals to face many challenges, such as distrust, injustice, and bias. Although building equity in education is essential for school principals to deliver a high quality of education in China, they need to work with teachers, parents, and students to promote equality in education (Authors, 2020). Since China is an interpersonal relationship society, Chinese school principals sometimes feel that they have difficulty treating all the stakeholders differently. Conceptually, they treat all the school stakeholders equally and work with teachers, parents, and school superintendents for student achievement.

In addition, the characteristic of the private schools in China brings more challenges to school principals because they play the reconciling top-down policy intent role (Authors, 2020). This viewing means that Chinese school principals need to work with their supervisors, and government officers and collaborate with subordinates, including teachers, parents, and students. However, Chinese educational policy emphasizes that Chinese school principals have five specific principles: morality first, talents cultivation orientation, development, emphasis on abilities, and lifelong learning (Authors, 2020). However, Chinese school principals understand how challenges they face when they build equity in education in the top-down school culture. This study investigates the Chinese school principal's experiences in leading the school equity for school improvement. Since China is a guanxi (interpersonal) social network (Authors, 2020), Chinese school principals need to create good guanxi with students, parents, teachers, and partners to generate school equity in education.

Furthermore, this study used the semi-structured protocol interview, open-ended interview, and self-reflectivity in-depth understanding of the Chinese school principals' experiences, using descriptive and interpretive approaches to analyze the interview data to answer the research questions (Denzin & Lincoln, 2018). Also, this study aims to collect the principals' opinions, expectations, and beliefs through observation, interviews, field notes, and memos to discover what elements are essential for school principals to build an equitable educational environment for student achievement. This study aims to understand and interpret the Chinese school principals' experience, opinions, and beliefs on how they could implement and build the school program and provide a high-quality program for school principals in building equity for student achievement (Denzin & Lincoln, 2018). Therefore, this descriptive analysis and interpretive approach analyze the participants' experiences, beliefs, and opinions through coding, categorizing, and synthesizing (Saldana, 2015).

Researcher Description and Participants

Since we have received western and eastern higher education and one of our researchers has over fifteen years of working experience in secondary high school in China, the researchers realized how Chinese school principals face challenges and difficulty building equity in education. Since we, the researchers, are working in several high schools in several provinces in China, we understand the differences between the school stakeholders in the school. The researchers understand the Chinese cultures, school characteristics, school issues, and school difficulties, such as lack of school equity. The Chinese school principals lack systematic equity training to build an equitable educational environment in school. In addition, we aim to discover what challenges Chinese school principals face and respond to the challenges they face. The study seeks to determine what strategies Chinese school principals use to build an equitable educational environment for student achievement.

We aim to discover how Chinese school principals face their challenges in building equity in school. We used the random sampling approach to collect data from the participants. Due to the pandemic's impacts, researchers face many challenges in recruiting potential participants in China. We randomly select the likely 50 Chinese school principals in the Secondary School data. Then, we collected data through random sampling and snowball sampling to collect the data. The purposive samplings were collected from the twelve participants (N=12). The participants are randomly selected from the secondary high school database, and then we also use snowball sampling to recruit more participants. We selected twelve participants from Chinese secondary high schools, six male and six female school principals (See Table 1 in Appendix A). They have several years of working experience in administrating the schools. The age ranges from 28 years to 58 years old with the working experiences from 3 years to 20 years of working experiences in the public school and private schools in China.

Descriptive and Data Collection

In this study, I collected data through interviews with the Chinese school principals from January 12, 2021, to September 15, 2021. I recruit 12 purposively participants in China and used several steps to collect the data. The Institute Research Bureau approved me with the identification number 1-12-2021. After that, I started to recruit potential participants in China. I randomly selected fifty principals from the online secondary school database in China. Then, I went to the school's official website to verify the potential participants. With analysis, we finalized the 30 potential participants. Then, we sent an email with the requested email attached for them. In two weeks, we received two Chinese school principals' responses and made an appointment to have a brief talk with them. Then, we set up a formal interview with them individually using zoom. Besides, we sent a reminder to the twenty-eight left participants to invite them to participate in my study in another two weeks. Fortunately, we got another five principals' replies to my requests. Then, we set up a brief talk with them and have a formal one-on-one interview with them. The average time of the interview is 45 minutes for each of the participants. After interviewing each participant, I used the snowball sampling approach to recruit other participants. With their support and recommendation, we received five Chinese school principals participating in my study with one-on-one interviews.

Specifically, we used the semi-structural interview protocol and open-ended interview questions to collect the primary data from the participants (Flick, 2018). For research question one, we used the five interview questions to collect data from them. The questions are (1) What are your challenges in leading the school in China? (2) What are the essential educational values you think for high school students in China? (3) How do you build school values such as equity in leading school improvement? (4) How do you face the educational challenges in your school? (5) Are there any things that I have not asked you want to share with me?

For research question two, we used another five research questions to collect the data to answer my research questions. The questions are (1) How do you respond to the school issues you just shared with me? (2) Why do you think the approach is practical? (3) How do you build an equitable educational school environment? (4) Among the approaches, which approach do you think is practical for building equity in school and why? (5) Are there any things that I have not asked you want to share with me?

For research question three, we used the other five research questions to collect the data to answer my research questions. The questions are (1) What strategies do you usually use to build equity in school? (2) Among the strategies, which strategy do you often use and why? (3) How do you use the strategies to build equity in school? (4) How do you work with other school stakeholders, including teachers, parents, students, and others, in building an equitable educational

learning environment in school? (5) Are there any things that I have not asked you want to share with me?

Besides the semi-structured interview questions, we also used open-ended interview questions to collect the participants' opinions, perceptions, and experiences in answering my research question in this study.

Data Analysis

We used the iterative process to analyze the transcripts. We identified emerging themes by examining the transcripts, memos, and reflective journal log using multiple cycles of coding and analysis process (Adu, 2019; Saldana, 2015). After conducting each interview with the participants, we recorded and discussed initial thoughts and impressions to transcribe and analyze participants' experiences. In general, in the first cycle of coding, we read the transcripts to classify the participants' responses into coding, analyzing, categorizing, and synthesizing (Saldana, 2015). We also used the six-stage of the data analysis process used to incorporate the themes by "preparing qualitative data, exploring data, empirical coding indicators, and developing categories or themes (Adu, 2019, p. 223). Adu (2019) coded the data by "identifying empirical indicators, generating meaning, providing an answer, creating code, and developing code description (p. 98)." The second cycle was to categorize and develop the themes through interaction and analytic memos associated with answering the research questions (Flick, 2014).

Specifically, we carried out the process of analyzing the obtained data in six steps: (1) We read the written transcript several times to get an overall sense of meanings and critical ideas. (2) We highlighted significant phrases and sentences directly linked to my study purpose and research questions. (3) We extracted those highlighted phrases and sentences such as codes and developed meaning-based clusters of significant statements or codes; We examined multiple ways to cluster and organize these codes until they crystallized around common topics from all participants' transcripts. (4) We used the emergent topics, and the participants shared experiences and their meaning from those experiences related to equity in school. (5) We compared the major themes coded in the transcripts in the United States and China and found the significant themes and sub-theme responding to my research questions. (6) We used member checking to let the participants read and validate my in-depth and detailed descriptions. We extracted the significant thematic elements from those descriptions into a set of themes and sub-themes. Therefore, we emerged the major theme to answer my research question accordingly, and the credibility of the data was verified by a member check (Saldana, 2015).

Trustworthiness

We make sure the study is valid and reliable. We used member check, reflective log, and audit trail to satisfy the saturation in this study (Merriam & Tisdell, 2016). In addition, we used the memo to develop themes and created a research audit trail to ensure its quality. We also invited one

of the doctoral candidates to ensure the data is clear enough and accurate and all materials audited (Crotty, 1998). Therefore, we strictly followed the qualitative research disciplines to ensure consistency and trustworthiness in this study.

Results

All merged and coded data were into the themes that reflect how the school principals could work with other school stakeholders such as teachers and students for building an equitable educational environment for student achievement. The descriptive and interpretative analysis presented how the school principals could generate the core value of creating an equity educational environment for student achievement. Therefore, findings related to building an equitable educational environment among stakeholders present per research questions in order. Since some responses were typical, we provide quotes to support the main themes found in this study.

Research Question 1: What are the challenges of the Chinese high school principals in building an equitable educational environment in private schools in China?

Findings show that Chinese school principals face the three major challenges based on the analysis from the participants in my study (See Table 2 in Appendix B). The three challenges are:

1. Passing testing score first, but equity second.
2. Disengagement between school principals and students, parents, and teachers.
3. Insufficient resources.

The first challenge in this study is that secondary Chinese school principals play the central role of working with teachers for students' high academic performance, such as testing scores. Zheng (2014) stated that Chinese educators face the challenges of training students to pass the exam with the highest testing score. Zhou, Liu, Tian, and Li (2018) said that Chinese private school principals face pressure from student achievement. This viewing showed that Chinese school principals always pay the academic performance first because of several reasons. One is that the high testing score symbolized those Chinese students have the chance to enter the top universities and increase the school social reputation among the schools in the high-power distance school contexts in China. Another is that the students who graduated from the top universities, both national and international, have a better chance of finding a better job in the competitive job markets in China. For example, some company recruits the employees by selecting the students who were graduated from the top 100 universities in the world first. This situation causes the school principals to hesitate to promote the educational core values first in the Chinese school contexts. However, we still support those principals need to encourage the educational core values for students' lifelong learning, student achievement, and school sustainable growth. Darling-Hammond (2014) supported my views that school principals need to promote the educational core values in 21st-century

education. Ravitch also (2020) hold the similar viewings that teaching for testing causes school to lose the values and serves the students face their challenges in life, such as losing the ability to solve problems and creativity. Therefore, my study encourages principals to generate the educational core values for student academic achievement, lifelong learning, and school sustainable growth.

The second challenge is that Chinese school principals have difficulty working with teachers, parents, and students to emphasize equity in teaching and learning in the Chinese school contexts. Although disengagement is an issue for school principals to lead school improvement globally, our study found that Chinese school principals understand that they need to promote equity in school in China secondary school contexts. Imperatori (2017) indicated that principals need to drive the school improvement for equal education through reducing the disengagement at work. However, the Chinese school principals hesitate to emphasize the core values such as equity. This viewing is because they must help students achieve their learning goals, such as the highest testing score. If the school principals required teachers to address the equity for students in learning, teachers feel too much pressure because they have not received the training on treating all the students equally in the school (Authors, 2021). Since the private school owners tend to reduce the cost and pay less for teacher professional development, the Chinese school principals need to maintain the teacher commitment through less workload besides the teaching for student high performance. However, this condition in school causes students to lose the sense of equity in contributing to the community. Bandura (2016) said that the disengagement between school stakeholders harms the school improvement. Therefore, we hold the viewing that Chinese school principals need to address equity in school in teaching and learning. Teng, Manzon, and Poon (2019) claimed that school stakeholders' equity drives schools to the high-performing educational outcome. Thus, principals need to work with teachers, parents, and students to build equity in teaching, learning and administrating.

The third challenge is that Chinese school principals face insufficient resource issues. Since the characteristic of the private school is to run for business, the school founders tend to save the cost for more profit. Zhou, Liu, Tian, and Li (2018) supported my view that school principals tend to avoid being complained from the supervisors and school founders in the schools and save the cost expected by their supervisors in the school. Renchens (2020) also claimed that school principals need to build sustainable growth by reducing the cost for stakeholders' benefits. That is why school principals might not receive support from their supervisors to promote equity in education in the school. This viewing is because the school principals could not receive more financial support from the school founders. In this manner, school principals lack enough funding to create teacher equity professional development programs and equity projects for school core

values promotion. Therefore, principals lack enough resources to build an equitable educational environment in the school.

Research Question 2: How do Chinese high school principals respond to the challenges in building an equitable educational environment for student achievement in teaching and learning in private schools in China?

Findings show that Chinese school principals usually use the three major ways to respond to the challenges (See Table 3 in Appendix C). The approaches are:

1. Promoting the education core values such as equity in education.
2. Engaging with students, parents, and teachers.
3. Seeking support from the superintendent, partners, and school founders.

The first way of promoting education core values such as equity could help school principals build an influential social image and school sustainable growth. Promoting educational core values could help the school principals to work with all the school stakeholders for school vision, mission, and core values in building equity in school. Huws (2015) stated that building equity in teaching and learning between school stakeholders could increase the school's social reputation. Trujillo, Moller, Jensen, Kissell, and Larsen (2021) also claimed that school core values such as equity could increase the school images for social justice and equity for student enhancement. Yang (2020) additionally claimed that school principals build an equity image between students for school social reputation in the competitive school market in China. The reputation could bring school performance for school sustainable growth. Han (2015) claims that building a reputation could indeed make a school sustainable development. Laurie, Nonoyama-Tarumi, McKeown, and Hopkins (2016) also said that educational core values could increase school social image for school sustainable growth. Therefore, this study found that school principals need to build equity by emphasizing the school's core values for school reputation and sustainable development.

The second way of engagement with students, parents, and teachers could help the school principals increase the school effectiveness through student engagement, teacher commitment, and parent involvement for school improvement. This study is compatible with previous studies that engagement between school stakeholders could increase school effectiveness, such as student testing performance (Authors, 2020). Zhou and Ren (2017) claimed that engagement between schools' stakeholders is an effective way for school principals to improve school performance, such as student learning outcomes. Reimer (2015) also holds the similar viewing that school principals need to engage with all the schools' stakeholders for school outcomes.

However, this study found that sometimes school principals have difficulty building an engagement with students, teachers, and parents if they promote equity in school. For

example, when we worked in one of the international private schools in Beijing, we did not hear the school principals emphasize the school core values such as building equity in school instead of the testing results. This viewing is because school principals pay too much attention to student testing performance and school effectiveness. However, Burgess (2021) supported my viewing that school principals need to build equity in school through engagement building. Therefore, we claimed that school principals need to build engagement for school outcomes in China's high-power top-down school system.

The third way of seeking support from the superintendent, parents, and school founders could help school principals build equity in school for student academic achievement and lifelong learning. Creating equity between students, teachers, and parents is difficult for school principals to receive support from the superintendent, parents, and school founders (Authors, 2020). This study found that school principals still need to promote school core values such as equity for student achievement and lifelong learning. The previous research, such as Sorbring and Lansford (2019), pointed out that school principals could help students achieve their learning goals if they receive support from all school stakeholders. If school principals receive support from the superintendent, teachers, and parents, they could help the students to raise students high expectations for lifelong learning outcomes. Lee, Ostwald, and Gu (2020) claimed that school principals need to always work with other stakeholders for school effectiveness. Therefore, this study claimed that school principals need to seek support from other school members for students' learning achievement.

Research Question 3: What strategies do Chinese high school principals create for building an equitable learning environment for student achievement and school sustainable growth in private schools in China?

Findings show that Chinese school principals use the three major strategies to build an equity educational environment in leading the school development in China school contexts (See Table 4 in Appendix D). The three strategies are:

1. Dialogue between school stakeholders.
2. Building a school fair evaluation system.
3. Having cooperative projects for school improvement.

Firstly, school principals use the dialogue between school stakeholders could effectively build an equitable educational learning environment. Bohm (2004) stated that dialogue is an effective strategy for school principals to work with teachers, students, parents, and others school stakeholders for school effectiveness. Johnson and Hackman (2018) also claimed that communication between school principals and other school stakeholders such as students, teachers, and parents could build an equitable educational environment in competitive school contexts. Their viewings support my findings in this study that school principals need to use the dialogue to make equity in school in China's secondary high school contexts. Thus, using dialogue for school principals create equity in school for student achievement.

Secondly, school principals build a school fair evaluation system for generating school equity in secondary high schools in China. This study found that school principals lack enough training on how school principals build equity in teaching and learning in school contexts. Some of the participants in this study stated that they expect to receive some evaluation theory and knowledge training. However, they have no chance to improve their knowledge because the school founders tend to save the cost and not offer teachers and school principals the training opportunity. This study found that school principals expect to receive the theory and knowledge of program evaluation training for school effectiveness and equity. Mertens (2010) claimed that evaluation is a practical approach for school principals to build an equitable learning environment for student academic outcomes. Therefore, school principals in this study believe that building a fair evaluation system is necessary for student achievement.

Thirdly, school principals build a cooperative project for school effectiveness and equity. This study found that school principals could create an equitable educational environment for student achievement if the school principals could have more cooperative projects. Students and parents believe that a higher score could help the students to have the chance to receive a college offer and to have a better job opportunity after they graduate from the top universities in the world. That is why this study found that school principals need to ensure that students could receive a college offer after three-year study in the secondary high school in Chinese school contexts. School principals have the chance to build an equitable educational learning environment in China school contexts. Therefore, school principals need to develop more cooperative projects in school for student achievement.

Appendix A

Table 1

Overview of the Participants of Chinese School Principals in Secondary High Schools in China

Coding	Position	Gender	Age	Years of Working Experiences	Graduate Degree
Principal 1	Principal	Male	58	20	Ed.S.
Principal 2	Vice Principal	Female	45	13	BA
Principal 3	Vice Principal	Female	28	3	BS

Principal 4	Principal	Male	35	6	MBA
Principal 5	Principal	Female	30	5	BA
Principal 6	Vice Principal	Male	37	6	BS
Principal 7	Principal	Female	48	10	MA
Principal 8	Principal	Male	51	13	BS
Principal 9	Vice Principal	Male	56	15	MS
Principal 10	Principal	Female	49	12	BA
Principal 11	Vice Principal	Male	55	13	BS
Principal 12	Vice principal	Female	47	11	MS

Appendix B

Table 2

Three Major Themes Challenges with Quotes from the Participants

Major Themes	Quotes Selected from the Participants
Theme 1: Passing Testing Score first, but equity second	<ul style="list-style-type: none"> When I teach students and chat with some of the students, I said that cultivating students core values such as equity in school. However, one of the students said to me: "equity can help me to pass the exam?" I was so surprised that the students ask me this question (Principal 1) I think I need to prioritize the score first because I have to ensure my students could go to college. However, I think equity or other core values can help students to be successful in study (Principal 4). I remember some of the parents complain me if I could guide teachers to help their kids to pass the exam. I wonder why they do not pay attention to the school for their kids' values (Principal 12).
Theme 2: Disengagement between school principals and Students, Parents, Teachers	<ul style="list-style-type: none"> I would like to say sometimes when I told my teachers to emphasize the equity, or other educational core values, I felt that they disagree what I said to them (Principal 3). Sometimes, I hesitate to tell parents if the students have no good performance such as testing score. Usually, parents want to see the highest academic outcomes (Principal 2). I think students just focus on their learning, but they neglect their value-building. For example, students usually ask teachers about their testing and learning outcomes, but less time to share their feelings with their teachers, and classmates (Principal 6).
Theme 3: Insufficient Resources	<ul style="list-style-type: none"> I think I need to seek the approvals from the school boards, but most of them do not pay attention to my requests. I think they do not want to spend too much cost for building the values (Principal 5). In my school, there is no school counselor, or psychologists. If students feel too many pressures, they have no way to seek help. In this manner, I want to help students to build their confidence or some core values by cultivating their attitude, I have difficulty (Principal 1). In my school, there is no library and also students have limited time to search information online in the school (Principal 3).

Appendix C

Table 3

Three Major Theme Response to the Challenges with Quotes from the Participants

Major Themes	Quotes Selected from the Participants
Theme 1: Promotion the Education Core Values	<ul style="list-style-type: none"> Although sometimes I feel too many pressures, I still

such as Equity in Education

believe that I have to embrace the educational core values. I want to make a change (Principal 7).

- I believe promoting educational core values such as equity, trust, are a key for school improvement (Principal 9).
- I need to emphasize the core values and also to ensure the student academic, emotional, and psychological integrity (Principal 11)
- I try to transform my beliefs about educational core values with my teachers and parents. I want to receive their support (Principal 8).
- Although I face the disengagement with teachers, parents, and students, I will try my best to seek their support. I think I need to always emphasize the core values such as equity in school (Principal 1).
- I often told myself to work with students, parents, and teachers for their support. Although I know the testing score is important, I still think I need to emphasize the core values by working with them for building them (Principal 10).
- I think I can make a change only if I receive support from superintendent and school founders in my school (Principal 5).
- I can write a proposal to get support from school founders by discussing with them (Principal 4).
- I think I also need to work with school superintendent and school founders' support. I think only I can receive their support; I can promote in the school effectively (Principal 10).

Theme 2: Engagement with Students, Parents, and Teachers

Theme 3: Seeking Support from Superintendent, Partners, and School Founders

Appendix D
Table 4

Three Major Strategies of Building an Equitable Learning Environment with Quotes from the Participants

Major Themes	Quotes Selected from the Participants
Theme 1: Dialogue between School Stakeholders	<ul style="list-style-type: none">• I think the best strategy for me to promote equity or school values by using dialogue (Principal 1).• I want to share one of my experiences with you. When I deal with the parents' conflict due to the student's testing failure mark, I successfully solved it through communication (Principal 7).• I usually deal with the school issues through dialogue first, I think (Principal 12).
Theme 2: Building School Fair Evaluation System	<ul style="list-style-type: none">• I think right now my schools need to build an evaluation system for student academic performance and teacher performance in teaching (Principal 9).• I believe a fair evaluation system is important for me to promote equity in education (Principal 3).• Right now, my school founders evaluate teachers' performance just depend on the students testing score. I think it is not integrated (Principal 5).
Theme 3: having Cooperative Projects for School Development	<ul style="list-style-type: none">• I think if the schools could have more cooperative projects, I, as a principal, can easily promote the educational core values such as equity (Principal 7).• I believe if I could provide more opportunities to my students in the school, I think they could listen to my implementation such as promoting equity, and other core values in school (Principal 8).• I can emphasize the equity and other core values if I could make sure to help the students to have the opportunity to

receive their college offer. However, I think I need to spend more time to transform my belief to students and also to seek more projects for their success in study (Principal 1).

Conclusion, Implications, and Future Studies

This study concluded that school principals need to build an equitable educational environment for student academic achievement. Specifically, this study found that school principals face the three challenges in building equity in school. One is that school stakeholders pay attention to the student testing score first and the equity second. Another is that school principals have difficulty engaging with school stakeholders if they promote school equity. The other is that school principals lack enough resources while building an equitable educational learning environment.

Regarding the challenges, school principals use the three approaches to respond to the challenges. One is promoting the education core values such as equity in education. Another is engaging with students, parents, and teachers. The other is seeking support from the superintendent, partners, and school founders.

Finally, this study found that school principals can use the three strategies to build an equitable education environment in China school contexts. The three strategies are a dialogue between school stakeholders; building a school fair evaluation system; having cooperative projects for school improvement and student achievement. This study also implies that school principals need to work with students, teachers, and parents to build equity in school. Although the secondary high school principals must prioritize the student testing performance for students' college study, this study suggested that they must shift from the testing focus to value-based lifelong learning for student achievement. Thus, this study suggested that future studies focus on building equity, trust, and autonomy for becoming antiracial leaders in school improvement using a comparative study in the United States and China.

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