Chinese Pre-service Teachers' Perceptions of Teaching Practicum under Contrasting Contexts: Implications for Rural Teacher Preparation

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Abstract

Globally, university-based teacher education preparation programs have received much criticism in preparing teachers for impoverished schools. Drawing on data from an incentive program to improve teacher education in China, the authors comparatively investigated the field experiences of pre-service teachers from contrasting settings (urban and rural schools). Under the perspective of Culturally Relevant Pedagogy, the study focused on the pre-service teachers' perceptions of the teaching practicum and how well the program had prepared them for rural schools. The authors also focused on unsuccessful aspects of the teaching practicum, such as pre-service teachers' lack of knowledge and skills with regard to instructing diverse students and pre-service teachers' commitment to teach in rural schools. We found pre-service teachers who taught in urban schools reported more positive field experiences and a higher teaching commitment than those who taught in rural schools. The rural pre-service teachers reported more difficulties in linking their college courses with actual practice and settings. The policy implications for rural teacher preparation were discussed.

Keywords: teaching practicum, pre-service teachers, teaching commitment, Culturally Relevant Pedagogy, China, rural schools

Introduction

Globally, university-based teacher education preparation programs have been scrutinized in preparing teachers for impoverished schools. (Wiggins et al., 2007). China, for example, faces persistent challenges on how to prepare and retain pre-service teachers for rural areas, where most schools suffer poor resource distribution (Qian & Smyth, 2008; Luo & Mkandawire, 2015).

Since the 1980's China's rapid economic growth has significantly increased the inequality of household income between urban and rural areas (Shi 2004; Stratford & Cowling, 2016).

According to the OECD's China report, the 2012 household income per capita in urban areas was three times higher than rural areas in comparison to 1978, where the household income per capita in urban areas was two times higher than rural areas (2016). This wide urban-rural income gap was partly caused by the household registration (*hukou*) system. This system hindered rural residents' free movement and limited their access to better education, healthcare and employment opportunities (Stratford & Cowling, 2016). Besides the economic disparity, the urban-rural gaps also include political, social, and cultural differences (Wang, 2018).

In the last 30 years, these social and economic disparities have resulted in a large achievement gap between urban and rural schools (Thomas, Wang & Fan, 2001; Qian & Smyth, 2008). This achievement gap continues to grow. Since 2000, the increasing emphasis on education equality in China has called for more educational responses to increased urban-rural gaps (Leibold & Chen, 2014). Some new initiatives linking school curriculum with local cultures and conditions have emerged, and more localized teaching materials have been introduced to public schools (Leibold & Chen, 2014). Correspondingly, scholars and educators have called on Chinese teacher education systems to develop approaches that target students from all backgrounds, especially the students from impoverished schools (Qiquan, 2008).

In 2007, the Chinese government implemented an incentive policy, Free Teacher Education Program (FTEP), to attract pre-service teachers to teach in rural schools (Lin & Zhang, 2006). According to this policy, students have the opportunity to receive a free four-year undergraduate education from six of the most prestigious teacher preparation institutions of China in exchange for a commitment to work in public schools for 10 years, with the first three years employed in rural schools (MOE, 2007). By 2015, two cohorts graduated from the FTEP program, but less than half of them chose to work in rural schools. For those who did obtain rural teaching positions, the turnover rate was high (Luo & Mkandawire, 2015). Besides factors, such as poor working conditions (Yang & Wang, 2007), Were there any other driving forces that may have contributed to pre-service teachers' reluctance to work in rural schools? In the current study, we examined the potential influences of the teaching practicum on pre-service teachers' rural teaching commitment.

In the last three decades, a considerable amount of Chinese research literature has highlighted alongside many Western countries the disconnections and contradictions between the subject matter of teacher education preparation programs and actual public school settings (Wang & Paine, 2001; You & Jia, 2008). Among the criticisms, is the over-emphasis of university-based courses and the large gap between educational theories and teaching practices (Qiquan, 2008; Zhang, 1995). As English and Lewison (1979) described, the teaching practicum seemingly does not fit into the "academic ballgame" (p. 47). Due to the narrowness and simplification of the teaching practicum, field experiences have been underappreciated (You & Jia, 2008), and teachers are not fully prepared for teaching children, whose cultural backgrounds are different from their own (Wang & Gao, 2013). Some researchers and teacher educators scrutinized how teacher education courses were mainly out of date or city-oriented, and they questioned how these courses impacted rural and minority communities (Chuanyou, 2010).

To aid pre-service teacher practice and retention, we need to assess whether the program has prepared pre-service teachers for teaching in various contexts, particularly the schools within rural communities. An analysis of pre-service teachers' experiences in rural schools is

important for understanding the challenges they face, given the limited resources in those schools and the positional gaps between campus-based courses and field experiences. Furthermore, scholars have studied the purpose of the teaching practicum, as it serves as a space for developing teaching skills (Darling-Hammond et al., 2002), facilitating teaching reflection (Tarman, 2012), and improving teaching efficacy and confidence (Sinclair, 2008). Limited work, however, has focused on the role of the teaching practicum experiences with respect to the pre-service teachers' commitment to teaching (Ronfeldt, 2012). This point is important since teacher education programs across the world are held more accountable for the retention of pre-service teachers (Zeichner, 2010).

Among the teaching practicum experiences, we are primarily interested in unsuccessful aspects of the teaching practicum, such as pre-service teachers' lack of knowledge and skills with regard to instructing diverse students and pre-service teachers' commitment to teach in rural schools. Although this study was conducted within the context of China, preparing future teachers for a wide range of social, economic and cultural contexts remains one of the major challenges facing teacher education systems across nations with diversity agendas (Darling-Hammond, 2017). We anticipate the results of our study will provide insight to the research on how to more effectively enhance pre-service teachers' commitment to teach in impoverished schools. The findings may also be useful in determining which components of the teaching practicum are more beneficial for rural teacher preparation.

Drawing on data from the FTEP, the authors comparatively investigated the field experiences of pre-service teachers from contrasting settings within China's schools (urban and rural schools). Under the perspective of Culturally Relevant Pedagogy, the study focused on the participants' perceptions of teaching practicum and how well the program had prepared them for rural schools. The purpose of this article was threefold. First, this study identified and analyzed the variations in the teaching practicum of pre-service teachers across urban and rural settings. We analyzed whether the pre-service teachers, who conducted their teaching practicum in the rural schools, had less positive field experiences than their urban peers. Second, we compared the teaching commitment of pre-service teachers in both rural and urban areas to see whether the rural group had addressed lower levels of teaching commitment than the urban group. Third, we discussed the policy implications for rural teacher preparation.

Teaching Practicum and Teaching Commitment

The complexities and responsibilities of teaching can be a reality shock, driving pre-service teachers away from the teaching profession before they really begin their career (Rots & Aelterman, 2009). Some empirical evidences have confirmed pre-service teachers' teaching experiences may influence their future attrition and effectiveness in the schools (Ronfeldt, 2012). Early teaching experiences are also partly responsible for pre-service teachers' reluctance of entering the teaching profession (Goldhaber et al., 2015). Chapman (1984) argued the quality of teachers' early experiences was more associated with their teaching commitment than their academic background and performance.

Research results are inconclusive in terms of the relationship between the teaching practicum experience in diverse schools and teaching commitment. Some scholars suggest learning to teach in underserved schools results in positive effects on pre-service teachers' self-efficacy, commitment to work in those schools (e.g., Masinire, 2015; Weisman & Hansen,

2008), and enhanced cultural competence (e.g., Stachowski & Frey, 2003). Anderson and Stillman (2013) conducted a systematic review and found the changes of pre-service teachers' stereotypical attitudes toward poor students when placed in high-poverty schools. Some scholars have specifically examined how successful rural teaching experiences have positively affected pre-service teachers' motivation and commitment to the rural education (Lock 2007). In general, the optimization of the practicum in challenging schools may contribute to pre-service teachers' long-term commitment to teach in the schools that need them the most.

In contrast, some studies have reported negative effects of conducting teaching practicum in high-needs schools. For example, pre-service teachers tend to have less teaching confidence in diverse school settings (Settlage et al., 2009). The teaching practicum in highly-diverse settings can be challenging, reinforce pre-service teachers' negative attitudes, and drive them away from teaching in similar settings (Buehler et al., 2009). These negative teaching experiences act as hindrances to the development of a healthy teacher self-efficacy and a culturally responsive mindset. Negative attitudes and stereotyping are intensified when teacher preparation programs overlook the key role of school culture and context to teacher preparation (Kumar & Hamer, 2013).

Numerous studies have demonstrated the importance of preparing teachers for cultural competence, especially in diverse educational settings. Researchers have observed some negative outcomes when cultural incompatibility occurs between teachers and their students and schools, such as miscommunication, hostility, resistance and even school failure (Ball & Forzani, 2009). Scholars in China have also addressed the concerns over the disconnection and incompatibility of teaching with local communities, especially in impoverished schools. Pre-service teachers encountered challenges in building their rural teaching experiences and successfully integrating these experiences with their college courses (Luo & Mkandawire, 2015). Scholars observed the stereotypical beliefs of pre-service teachers regarding rural families and children, such as believing rural parents have lower expectations from their children in comparison to urban parents. In general, many pre-service teachers in China have simplistic understandings of their rural students' cultures and demonstrate little awareness of discrimination (Sang et al., 2009; Wang & Gao, 2013). Meanwhile, university faculty could not effectively facilitate the connections since they lack adequate first-hand exposures to those practicum sites (Lijie et al., 2016).

Culturally Relevant Pedagogy

In efforts to equip pre-service teachers with enough competence to teach diverse students in high-needs schools, one area that has attracted increasing attention is Culturally Relevant Pedagogy (CRP) (Ladson-Billings, 2000). CRP suggests teachers need to understand and value students' cultures and treat them as foundational resources of classroom teaching and learning. Teachers who utilize CRP must build on the knowledge and prior skills that students bring with them and transfer these skills into effective instructional practice (Ladson-Billings, 2000). To successfully teach all students, teachers must be able to understand the factors that influence student learning, such as educational equity, students' socioeconomic status, cultures and language (Stachowski & Frey, 2003). Therefore, rather than focusing on the superficial treatment of diversity, teacher preparation efforts should emphasize competence for teaching in culturally diverse educational settings. The effectiveness of culturally relevant

pedagogy in preparing pre-service teachers for teaching diverse students has been well documented (Morrison et al., 2008).

CRP and its practical applications reveal the inherent complexity of learning how to teach in highly-diverse settings, mediated by local contexts and culture (Anderson & Stillman, 2013). This pedagogy is a way for teacher education programs to acknowledge the critical role of bridging cultural nuances with educational courses and actual teaching realities (Ladson-Billings, 2000). Under the CRP perspective, teacher preparation programs should teach future teachers on how to capitalize in relating to students (Jehangir et al., 2012), to reflect on their own personal beliefs, and to combat negative stereotypes for working with diverse student populations (Maye & Day, 2012).

In the current study, we focused on the teaching practicum under different contexts. Based on CRP theory, we examined pre-service teachers' teaching skills within specific culture and contexts. Pre-service teachers' attitudes toward teaching experiences vary in light of cultural and contextual factors, such as school characteristics, student demographics, and supports received from the school and the mentor (LaBoskey & Richert, 2002; Waddell, 2013). The interaction with others inside or outside school settings may influence the pre-service teachers' perceptions and attitudes towards teaching in the particular school community (Ng et al., 2010). The lens of CRP sheds light on the following pre-service teachers' challenges in the teaching practicum: learning to identify and understand the diversity within and across classroom and school communities and learning to leverage the cultural and contextual knowledge relating to student and local communities (Gonzalez et al., 2005). To achieve a self-conscious mindset of teaching behaviors, researchers suggest teaching self-reflection. For instance, a review of relevant literature indicated reflective orientation could help pre-service teachers to reframe their understanding of teaching in diversity (Fortini & FitzPatrick. 2000). Linking pre-service teachers' pedagogical knowledge with critical reflection on their classroom experiences and personal beliefs will help them understand both the students' experiences and their own challenges and self-growth (Chang et al., 2011).

Methodology

Sample

The participants involved in this study were the pre-service teachers who were enrolled in the Free Teacher Education Program (FTEP) at one of the largest teacher education universities in China. Pre-service teachers in the current study are defined as students who have completed their course work, and students who are participating in the teaching practicum. The FTEP is a four-year teacher preparation program established to prepare teachers in various subject areas at the K–12 levels. The participants were randomly selected from Chinese and Math programs, as Chinese and Math are the core courses in middle schools of China. The participants conducted their public school teaching practicum in their fourth year of the program. A total of 732 pre-service teachers voluntarily participated in the survey at the end of their six-month teaching practicum. Of the 732 participants, 701 completed the survey. The distribution of female and male respondents was 61.8% and 38.2%, respectively.

Table 1: *Descriptive Statistics of Demographic Variables*

	N	%
Gender		
Female	433	61.8
Male	268	38.2
School placement		
Rural	320	45.6
Urban	381	54.4

The participants were randomly assigned to placements in urban and rural schools. Of the total pre-service teacher population, 54.4% of these pre-service teachers were assigned to urban middle schools. These schools were located in one of the largest cities in northwest China. The remaining pre-service teachers were sent to the rural schools, located on the outskirts of the city. The rural middle schools were similar to many other rural settings in China, with a heavy emphasis on agriculture (Chuanyou, 2006). Due to the historical and socioeconomic factors, urban schools in China have traditionally received more educational resources and are perceived as more attractive in comparison to the schools located in rural or small towns (Shah, 2016).

Instrument

The purpose of the instrument was to evaluate the overall quality of the FTEP teaching practicum. Some of the main components of the teaching practicum have been included into the survey based on a range of the following research literature: (1) perceived relevance, (2) school support, (3) mentor support, (4) teacher self-efficacy and (5) effectiveness of the practicum. A sixth construct was added to inquire about the pre-service teachers' teaching commitment after completing the teaching practicum. The instrument is an anonymous four-point Likert-type scale questionnaire. Participants were asked to respond to the items indicating to what extent they agreed or disagreed with a statement. High scores on the survey indicated positive attitudes towards their teaching practicum experiences, with response items ranging from "disagree" to "agree". The questionnaire contains two major sections: demographic information and the perceptions of pre-service teachers with regard to their teaching practicum. Each construct consists of 3-8 question items. Outlined below are descriptions of the six constructs of the survey.

Perceived Relevance (PR) Campus-based courses play a crucial role in the development of the pre-service teachers, and ideally, the teaching practicum should be aligned with the campus-based courses offered by the teacher education program (Zeichner, 2010). The participants

were asked to indicate the degree to which they felt teacher education courses were relevant to their teaching practicum.

School Support (SS) School support is a premise for a successful teaching practicum (Darlington-Hammond, 2006). Without sufficient school support, the critical partnership between the university and the field campus will become unstable, and pre-service teachers may receive limited guidance, supervision and access to facilities from the schools (Hastings, 2004; Siebert et al., 2006). The study measured pre-service teachers' attitudes toward the supports received from the school site of the teaching practicum.

Mentor Support (MS) Various studies have focused on the influential role of mentors regarding the development of pre-service teachers (Ingersoll & Strong, 2011; Rots et al., 2007). Researchers have confirmed perceived mentor support is associated with pre-service teachers' intention to teach (Rots et al., 2007). With the sufficient support of mentors, pre-service teachers are able to develop the skills of self-reflection and develop their teacher identities (Poulou, 2007). The present study measured pre-service teachers' attitudes concerning the mentor support during their practicum. In this study, the mentors were the classroom teachers assigned by the schools.

Teacher Self-Efficacy (TSE) According to Bandura's self-efficacy theory (1986), teacher efficacy is a situation-specific construct, meaning teacher's self-efficacy varies across different situations or contexts. When teachers feel they are not capable of controlling and managing teaching situations, a sense of powerlessness may lower their self-efficacy (Rosenholtz, 1989). Therefore, positive experiences become an encouraging reward while negative experiences may result in disengagement or leaving the profession (Ware & Kitsantas, 2011). The study measured the participants' teacher self-efficacy upon completion of their teaching practicum.

Effectiveness of Practicum (EOP) In order to investigate the extent of the pre-service teachers' perceptions of the effectiveness of the practicum, this construct primarily measured the participants' overall satisfaction towards their practicum experiences.

Teaching Commitment (TC) Research findings show many factors influenced teacher graduation rates. One of these factors was the initial commitment to teaching (Chapman & Green, 1986). Teacher commitment has been defined as a psychological attachment to a teaching career (Coladarci, 1992) and the intention to stay in teaching (Ware & Kitsantas, 2011). Although a variety of factors, such as teacher developmental professional stages, contribute to an individuals' teaching commitment (Sinclari, 2008; Whipp & Geronime, 2015; Wiggins et al., 2007), this study only focused on pre-service teachers' teaching commitment after completing their teaching practicum.

Data collection

The study was conducted at one of six teacher education universities in China with a population of around 50,000 full-time students. This university is one the largest teacher education institutes in the country and is under the direct administration of the Chinese Ministry of Education (MOE). The setting for the study was at the main campus located at a major city of northwest China. In April 2013, the data were collected in the participants' classrooms on the campus during their final semester of coursework.

Before research implementation, the researcher received the university's approval to conduct the research. For instance, phone calls were made to the department heads

explaining the study and requesting permission to conduct research. After receiving permission, the researcher and her graduate students distributed the paper survey in the students' classroom. All of the participants were given verbal information about the study before the paper survey was distributed. The participants were informed that their participation was voluntary, and they would not be penalized in any way if they decided not to participate or withdraw. The survey responses were anonymous, with participants providing information only about their gender and major. After the participants completed the survey, they were asked to place the completed survey in a non-descript, sealed envelope. Research assistants collected the envelopes from the participants.

Data Analysis

The completed questionnaires were coded and data were entered into the Statistical Package for Social Science (SPSS 23). Negatively worded items were reversed for analysis.

In the first phase, descriptive statistics were conducted on all quantitative items in order to examine if the data met the requirements and assumptions of the linearity and normality of the data. Each individual item was calculated by frequencies, means, and standard deviations. Missing value analysis showed there was no variable with 5% or more missing values, and missing values were randomly distributed throughout the dataset. Thus, the study employed list-wise deletion of missing cases.

The second phase was to perform a Factor Analysis. In order to identify variables (components), as well as to reduce the number of items by eliminating the items that have low factor loading on any one of the components (Jolliffe, 2002), the Principal Component Analysis (PCA) was used on the items to extract the number of factors. Another important purpose of conducting PCA was to explore the underlying structure of the responses for testing the hypothesized dimensions reflected in the survey (Field, 2009). Based on the result of PCA, 5 of the 34 items were removed from the study due to their low factor loading (< .40) (Field 2005). After performing the PCA, the study employed a Confirmatory Factor Analysis (CFA) with Mplus 7.1 to confirm the model.

In the third phase, a Multivariate Analysis of Variance (MANOVA) was executed. MANOVA is a suitable approach to look at the differences between subgroups (Field, 2009). In this study, MANOVA was conducted to determine potential differences in school placements (rural and urban) and gender with respect to the outcomes. MANOVA successfully examined the main effect of independent variables and possible interaction effect between independent variables on dependent variables (Field 2009). Moreover, MANOVA can be used to protect against an inflated Type 1 error, which is typically associated with series of ANOVA tests (Tabachnick & Fidell, 2007).

Although the present study provides useful insights into the issues concerning pre-service teachers' perceptions and preparation teaching practicum, it has certain limitations. First, the sample selection restrictions require caution in generalizing the results to other populations. Only participants who came from one teacher-education university were used in this study. Future studies may include more teacher education institutions from other regions in China with diverse social and cultural contexts. Furthermore, the findings are primarily grounded in participants' self-reports and should be taken into consideration when discussing the implications of this study. Hence, those constructs cannot be treated as standalone indicators of the development of pre-service teachers.

Results

Data Description

Descriptive statistics were implemented to provide a general picture of the data. Table 2 presents the means and standard deviations of participants' measures on the items (rural and urban group respectively) as well as skewness and kurtosis of the total distribution. The data in this study were deemed normal for the rest of the analysis (skew and kurtosis are under the range of 1 to -1) (Tabachnick & Fidell, 2007). The descriptive statistics of items revealed most items' mean scores for urban group were higher than rural.

Table 2: **Descriptive Statistics**

Survey Questions	Mean Urban/SD	Mean Rural/SD	Skewness (Total)	Kurtosis (Total)
1. The courses of the program have covered the majority issues related to teaching and learning.	2.70/ .64	2.56/ .65	-0.141	-0.405
2. My professors in the universities have conveyed knowledge by integrating theory and practice.	2.50/ .79	2.37/ .81	0.015	-0.47
3. What I have learned from our teacher education program was very useful to my teaching practicum.	2.52/ .76	2.40/ .68	-0.001	-0.44
5. My department provides/encourages various opportunities on how to best prepare us to meet the needs of all students.	2.57/ .74	2.45/ .71	0.077	-0.28
6. My program has offered me enough help and support to acquire needed understandings and abilities towards the teaching.	2.57/ .67	2.49/ .70	-0.05	-0.248
7. The courses that I have taken adequately represented the realities, issues and challenges of schools.	2.44/ .80	2.35/ .73	0.182	-0.323
8. In a timely manner, the school provided facilities and necessary and appropriate means in the practicum.	2.56/ .69	2.42/ .71	0.074	-0.34
9. The supports from schools were sufficiently structured to provide real assistance.	2.59/ .66	2.38/ .68	0.015	-0.341
10. The teachers in the school were very helpful during my teaching practicum.	2.65/ .68	2.47/ .69	0.036	-0.453
12. I was able to collaborate with my mentors to reflect on and improve my teaching.	2.54/ .66	2.39/ .67	-0.043	-0.224

13. My mentor played an important role in my progress during my teaching practicum.	2.61/ .64	2.46/ .64	0.068	-0.254
14. My mentor helped me put theory into practice.	2.58/ .60	2.40/ .62	0.12	-0.303
15. My mentor provided me very useful feedback based on my teaching work.	2.63/ .69	2.47/ .72	0.054	-0.263
17. My teaching skills were enhanced through the experiences of my teaching practicum.	2.53/ .76	2.42/ .78	0.173	-0.361
18. My practicum focused on the necessary teaching skills for the process of education.	2.52/ .69	2.42/ .69	0.317	-0.174
19. The method of evaluating my skills in the practicum were fair and appropriate.	2.56/ .71	2.47/ .68	0.168	-0.246
20. The teaching practicum experience has improved my understanding of teaching.	2.50/ .64	2.43/ .68	0.152	-0.19
22. The teaching practicum has provided me an opportunity to learn valuable teaching skills that would be difficult to learn in a classroom.	2.52/ .72	2.43/ .71	0.049	-0.251
23. The teaching practicum has fulfilled my expectations.	2.42/ .77	2.44/ .73	0.09	-0.311
24. In general, I was satisfied with myself during the practicum.	2.49/ .73	2.44/ .75	0.031	-0.298
25. During the teaching practicum, I was able to have the necessary content knowledge to teach effectively.	2.46/ .86	2.49/ .76	0.025	-0.503
27. During the teaching practicum, I was able to do daily teaching plans efficiently.	2.48/ .81	2.48/ .79	0.11	-0.458
28. During the teaching practicum, I was able to do use multiple instructional strategies to address individual student needs.	2.48/ .81	2.46/ .82	0.088	-0.488
29. During the teaching practicum, I was able to guide even the most difficult students.	2.33/ .81	2.33/ .79	0.082	-0.481
30. During the teaching practicum, I was able to manage the class well enough for effective lessons.	2.64/ .81	2.54/ .82	0.038	-0.536
31. During the teaching practicum, I was able to evaluate students appropriately	2.43/ .83	2.40/ .86	0.168	-0.552
32. After teaching practicum, I have a stronger sense of obligation to teaching.	2.61/ .61	2.50/ .56	-0.039	-0.267

33. After the teaching practicum, I came to appreciate more the workings and the challenges of teaching profession.	2.72/ .78	2.68/ .72	-0.022	-0.565		
34. After the teaching practicum, I was more determined to become a successful teacher.	2.61/ .75	2.48/ .66	0.042	-0.291		

Factor Analysis

In order to assess measurement dimensionality, Principal Component Analysis (PCA) with Promax oblique rotation was used to extract the factors with SPSS 23. The selection of oblique rotation was based on the assumption that the factors were correlated (Tabachnik & Fidell, 2001). The Kaiser-Meyer-Olkin measure of sampling adequacy for the sample (.928) was acceptable (>0.8 is considered a good fit) (Field, 2009). Bartlett's test of sphericity was significant ($p < .05$, sig. = .000), which showed the correlation matrix was not an identity matrix and the data were suitable for factor analysis (Field, 2009). The results of the six factors are presented in Table 3. These six factors together accounted for approximately 67.54 % of the total variance. All of the items, except for the 5 items that have been excluded from the study due to the low factor loading values, had a relatively high loading (i.e. > 0.60) on the factors. The results of the reliability analysis showed the values of Cronbach's alpha for six dimensions (see Table 3).

Table 3: **Principal Component Analysis of the Survey (N=701)**

Items (brief)	Factors					
	PE	PR	SS	TSE	MS	TC
19.	.913					
20.	.902					
22.	.900					
23.	.878					
24.	.858					
18.	.844					
17.	.817					
3.		.791				
5.		.787				
2.		.780				
1.		.718				
7.		.716				
6.		.672				
9.			.852			
8.			.807			
10.			.733			
28.				.883		
27.				.866		
31.				.849		
25.				.834		
30.				.800		
29.				.791		

13.					.882	
15.					.833	
12.					.802	
14.					.788	
33.						.727
34.						.710
32.						.662
Cronbach's alpha	.951	.702	.728	.919	.863	.706
Variance explained (%)	32.18	11.71	7.65	6.54	5.45	4.01
Total variance explained (%)						67.54

*Factor loadings below .40 are not shown in the table.

Confirmatory Factor Analysis (CFA)

In an effort to strengthen the conclusion of the six-factor solution received from PCA, the study employed Confirmatory Factor Analysis (CFA) with Mplus 7.1 program to test the proposed models and their fit indices (Muthén & Muthén, 1998). Several different fit indices were used to investigate the fit of the proposed models, such as the root mean square error of approximation (RMSEA), CFI and Chi-square ($\chi2$) etc. For the six factor model, the chi-square was χ^2 = 668.437, df = 390, p < .000. In CFA, a non-significant chi-square indicated a good model fit. However, the chi-square is sensitive to larger sample sizes (732 in the current study), which usually results in a significant chi-square (Kline 2011). In this model, the RMSEA was 0.032 (<.08), CFI = .993 (>.97 a good fit) (Kline 2011). Those indices have proved that the six-factor model fits the data, which has confirmed the results of the PCA analysis.

MANOVA

After the items forming the factors were reviewed, a 2 (gender)×2 (school placement) MANOVA was conducted with six variables: "perceived relevance", "school support", "mentor support", "effectiveness of practicum", "teacher self-efficacy" and "teaching commitment". The significant MANOVA result (at alpha level of 0.05) indicated a significant difference between groups and in at least one of the dependent variables. For MANOVA analyses, each level should include no less than 20 participants (Hair et al., 2006). In the current study, the sample size of each level was larger than 20. The Box's Test of Equality of Covariance Matrices for the six dependent variables were not significantly different (p=.514), which means the data have equal variance and covariance matrices across all groups. The Levene F test results (all larger than 0.05) indicated the homogeneity of error variance of the dependent variables have been met (Levene, 1960).

Table 4 demonstrates that there were significant differences between school placement groups, Wilks' K= .943, F (6. 642) =6.495, p =.000. The main effects of gender were also statistically significant, Wilks' K= .970, F (6. 647) =3.296, p =.003. The MANOVA results have not found any main interactive effects.

Table 4: **Multivariate Test Results: Gender and School Placement**

Effect	Wilks' Lambda	F	df	Error df	Sig.	Observed Power[c]
Intercept	.998	0.260	6	642	.955	.121

Gender	.970	3.296	6	642	.0.03*	.935
School placement	.943	6.495	6	642	.000*	.999
Gender*School placement	0.985	1.664	6	642	0.133	0.632

Computed using alpha=.05

Due to the independent variables of school placement and gender yielding significant results, the results of each dependent variable required examination. The between-subjects effects shown in Table 5 presents the more detailed results in terms of the differences. Significant univariate main effects for school placement were obtained on perceived relevance as well, F (1, 701) = 6.558, p=.011, partial η^2 =.011, power = .725. Significant univariate main effects for school placement were also obtained on school support, F (1, 701) = 13.880, p=.000, partial η^2 =.020, power = .961, and mentor support F (1, 701) = 13.361, p=.000, partial η^2 =.032, power = .958. In addition, the significant univariate main effects have also been found on teaching commitment in school placement groups, F (1, 701) = 4.784, p=.027, partial η^2 =.008, power = .599.

Table 5: **Between-Subjects Effects: Gender and School placement**

Between-subjects effects	F	df	Sig	partial eta square	Observed Power
School placement(Urban-Rural)/ Perceived Relevance	6.558	1	.011	.011	.725
School placement(Urban-Rural)/Mentor support	11.722	1	.001	.019	.929
School placement(Urban-Rural)/School support	13.361	1	.000	.032	.958
School placement(Urban-Rural)/Teaching Commitment	4.784	1	.027	.008	.599
Gender/Teaching commitment	11.034	1	.001	.017	.913

Based on estimated marginal means

*The mean differences is significant at .05 level

MANOVA analyses confirmed school placement had certain explanatory power for the dependent variables. The mean score of each factor for school placement (urban and rural) was estimated. Chart1 summarizes significant group differences by mean values. The mean for the rural group's perceptions of perceived relevance, school support and mentor support were significantly lower than the urban group, and the pre-service teachers who went to rural schools also had lower scores than the urban group, with respect to teaching commitment. Therefore, rural pre-service teachers reported (p < .01) less favorable experiences than their peers in urban schools on several aspects of teaching practicum. On the other hand, teaching in urban schools tended to have more positive effects on perceptions and attitudes regarding the teaching practicum and teaching commitment. Furthermore, the teacher self-efficacy scores for both groups (rural and urban) were relatively low (2.45 and 2.47 respectively) and there were no significant differences between the groups. Additionally, while there were no main effects for effectiveness of practicum,

overall the urban group (*M*=2.51) reported higher satisfaction than the rural group on their practicum (*M*=2.45). Lastly, a significant main effect of gender was observed for teaching commitment. Female participants were more likely than male participants to have a higher teaching commitment.
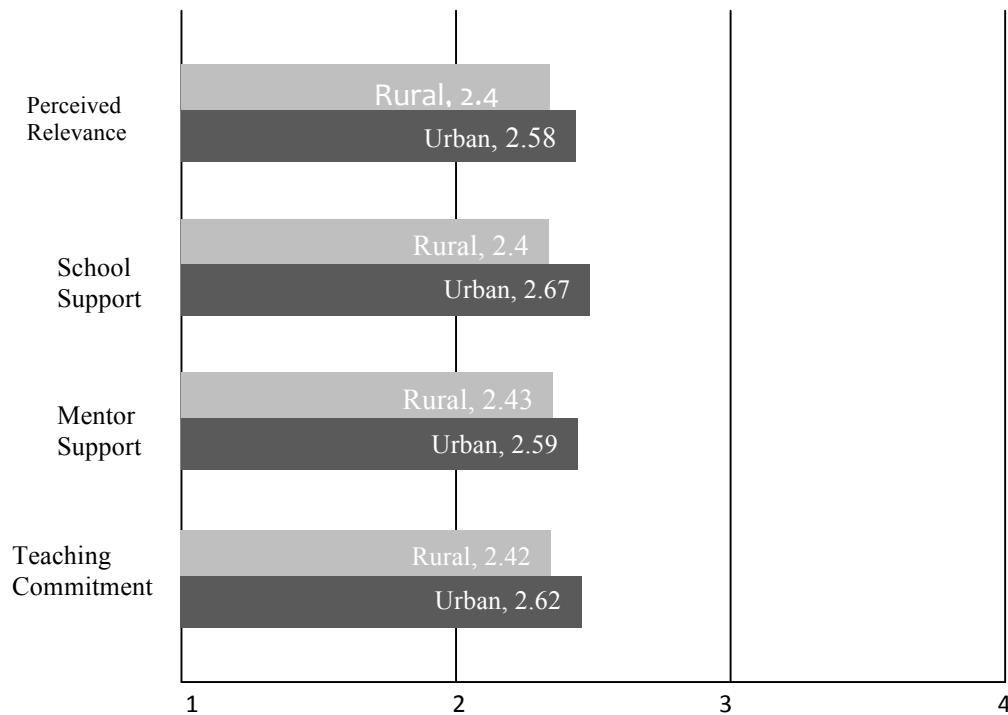

Chart 1: **Means Differences by Construct between Groups**

Discussion and Conclusion

Narrowing the educational gap by allocating more quality teachers to impoverished schools has long been regarded as one of the most urgent targets of educational policy in many countries. However, successfully preparing and retaining effective teachers remains a global challenge (Wang & Li, 2008). We found pre-service teachers who taught in urban schools of China reported more positive field experiences and higher teaching commitment than those in rural places. Reluctance to teach in rural schools remained among pre-service teachers. The findings also indicated teaching practicum might have played a role in shaping pre-service teachers' commitment.

This study provides a unique opportunity to examine pre-service teachers' field experiences under a comparative perspective—the differences across urban and rural groups. In general, we found pre-service teachers who taught in urban schools reported more positive field experiences and higher teaching commitment than those in rural places. Through the application of the MANOVA test, we observed this response pattern across the dependent variables of perceived relevance, teaching commitment, school support and mentoring. The participants who taught in rural schools have expressed less relevance between their college courses and teaching practice and more hesitation and reluctance for working as a teacher than their urban peers.

Under the perspective of Culturally Relevant Pedagogy, we addressed the problem of preparing pre-service teachers to work with students from diverse backgrounds. We identified a gap between what pre-service teachers learned in college and their actual teaching work experiences in a rural area. For example, 58% of rural pre-service teachers did not think the courses offered by their university were useful to their teaching practice, while only 40% of urban participants shared this opinion. Consistent with many similar studies (Frankenberg et al., 2010), we confirmed the rural pre-service teachers in our study were more likely to experience the disconnection between what they learned in their university courses and what they had to deal with in the teaching realities.

Guided by Culturally Relevant Pedagogy, this finding challenges the university teacher education program to focus on preparing teachers with cultural pedagogy and competency. We recommend a focus on a culturally relevant teacher preparation curriculum in order to assist pre-service teachers to successfully teach in rural and other underserved school settings and classrooms. As Green and Reid (2004) described the gap between teacher education and the realities of rural schools in New South Wales, the teacher education courses in China also largely reflected city perspectives and did not sufficiently equip the future teachers to deal with the specific and diverse situations of rural schools and communities. Therefore, pre-service teachers need to be prepared in methods to educate students from different backgrounds. We suggest that Culturally Relevant Pedagogy might be a suitable approach to help pre-service teachers develop cultural competence and bridge the gap between what they have learned and the real teaching situations they need to face.

Furthermore, both urban and rural pre-service teachers reported relatively low teacher self-efficacy. Since future teachers should be highly motivated to teach in diverse school settings, with positive perceptions and comprehensive understanding of teaching in rural areas, pre-service teachers may more actively pursue rural positions. Researchers found that the pre-service teachers who had more exposure to multicultural teaching theory and practice during their training usually had higher levels of self-efficacy (Siwatu, 2011). Hence, in order to instill confidence in pre-service teachers for teaching diverse students and enhance their commitment, we suggest teacher educators should be equipped with Cultural Relevance Pedagogy. The teacher educators equipped with CRP will be able to build and sustain meaningful relationships with their students, make real world connections for them and eventually improve students' cultural competences.

We argue mentors must also have extensive training in CRP. They have a responsibility to engage pre-service teachers in self-reflection. This study reveals the rural pre-service teachers received less mentor and school supports in comparison to the urban group. For example, compared with 55% of urban participants, there were only 44% of rural pre-service teachers who agreed that their mentor played an important role in their progress during the teaching practicum. The lack of effective mentoring might have negative impact on pre-service teachers' self-efficacy, especially to those who will teach in schools with various challenges (Aydin & Hoy, 2005). Mentors who received multicultural education are more likely to provide reflective support to pre-service teachers and guide them to reflect on the challenges that hinder them from accepting diversity (Smith & Glenn, 2016). Therefore, the school mentors in field should also have training of CRP in order to assist pre-service teachers to develop their culturally relevant teaching skills, such as how to develop more effective learning instruction and classroom environments to meet the needs of all students, specifically students at-risk.

We also analyzed the differences between male and female students regarding their teaching commitment. Female participants reported higher levels of teaching commitment than males, which align with some of the previous research findings (Fresko, Kfir & Nasser, 1997). Even though the specific factors contributing to the gender difference on teaching commitment in the current study still remain unknown, the finding sheds light on the important role of teacher education on narrowing gender disparity in commitment to teach.

The main goal of the FTEP was an attempt to address the increasing demands for quality teachers within rural and other underserved schools in China. However, we have revealed a conflict between the FTE policy mandate to teach in a rural area and the pre-service teachers' personal motivation to follow through on this commitment (Luo & Mkandawire, 2015; Guanghuai et al., 2015). In contrast to the pre-service teachers who taught in the urban schools, the rural participants expressed lower levels of teaching commitment. This finding also aligns with previous research regarding the challenges of teaching in highly-diverse schools and how those factors may have reinforced pre-service teachers' negative attitudes towards working in similar settings (Guanghuai et al., 2015). Thus, the financial incentive may have played a limited role in pre-service teachers' decision about whether to teach in culturally diverse schools. Instead of a financial motivation, the pre-service teachers' working environments and their ability to connect theory and practice may have also influenced their teaching commitment (Liu et al., 2004; Wang & Gao, 2013).

Nonetheless, the estimated differences in pre-service teachers' teaching practicum across school settings are of policy interest for at least two reasons. First, the differences may have closely reflected the information required by teacher educators to re-assess the effectiveness of preparation programs in attracting future teachers to challenging schools. For instance, the wide variations in perceptions toward the teaching practicum among rural and urban groups have practical implications for how a pre-service teacher should be oriented and prepared within highly diverse educational settings. One of the key considerations is to use a research-based approach (e.g., CRP) to enhance pre-service teachers' competencies in teaching diverse students. We argue CRP must begin long before the practicum, and it must be infused and reinforced regularly throughout the pre-service teacher curriculum in order for effective self-reflection. Second, policymakers have an interest in the overall levels of assigning and retaining more quality teachers for underserved schools. Our study has confirmed a concern over the quality of the teacher preparation programs, as they are insufficient and inequitable in terms of educating diverse learners in China (Qian & Smyth, 2008; Zhang, 1995). Rather than solely focusing on financial incentive, policymakers should pay more attention on the realities of uneven social, economic and educational development across regions, schools and individuals while designing and developing teacher preparation programs for underserved populations.

References

Anderson, L. M. & Stillman, J. A. (2013). Student teaching's contribution to preservice teacher development: A review of research focused on the preparation of teachers for urban and high-needs contexts. *Review of Educational Research, 83*(1), 3-69.

Aydin, Y. C. & Hoy, A. W. (2005). What predicts student teacher self-efficacy? *Academic Exchange Quarterly, 9*(4), 123-128.

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology, 4*(3), 359-373.

Buehler, J., Ruggles-Gere, A., Dallavis, C. & Shaw-Haviland, V. (2009). Normalizing the fraughtness: How emotion, race, and school context complicate cultural competence. Journal of Teacher Education, 60(4), 408-418.

Chapman, D. W. (1984). Teacher retention: The test of a model. *American Educational Research Journal, 21*(3), 645-658.

Chang, S., Anagnostopoulos, D. & Omae, H. (2011). The multidimensionality of multicultural service learning: The variable effects of social identity, context and pedagogy on pre service teachers' learning. *Teaching and Teacher Education: An International Journal on Research and Studies, 27*(7), 1078-1089.

Chapman, D. W. & Green, M. S. (1986). Teacher retention: A further examination. *Journal of Educational Research, 79,* 273-279.

Chuanyou, B. (2006). Policies for compulsory education disparity between urban and rural areas in China. *Frontiers of Education in China, 1*(1), 40-55.

Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *Journal of Experimental Education, 60,* 323-337.

Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education, 40*(3), 291-309.

Darling-Hammond, L., Chung, R. & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach? *Journal of Teacher Education, 53*(4), 286-302.

English, W. D. & Lewison, D. M. (1979). Marketing internship programs: Striking out in the academic ballgame. *Journal of Marketing Education, 1*(2), 48-52.

Field, A. P. (2009). *Discovering statistics using SPSS.* London, England: Sage.

Frankenberg, E., Taylor, A. & Merseth, K. (2010). Walking the walk: Teacher candidates' professed commitment to urban teaching and their subsequent career decisions. *Urban Education, 45,* 312-346.

Fresko, B., Kfir, D., & Nasser, F. (1997). Predicting teacher commitment. *Teaching and Teacher Education, 13*(4), 429-438.

Goldhaber, D., Theobald, R. & Tien, C. (2015). *The theoretical and empirical arguments for diversifying the teacher workforce: A review of the evidence* (WP #2015-9). Retrieved from The Center for Education Data & Research website: http://www.cedr.us/papers/working/CEDR%20WP%202015-9.pdf

Green, B., & Reid, J. (2004). Teacher education for rural–regional sustainability: Changing agendas, challenging futures, chasing chimeras? *Asia-Pacific Journal of Teacher Education, 32*(3), 255-273.

Guanghuai, F., Lu, Y. & Yiyin, L. (2015). Teacher education policy research in China: A decade review and reflection. *Higher Education of Social Science, 8*(4).

Hagin, D. A. (2012). *Free teacher education policy implementation in China* (Order No. 3521483). Available from ProQuest Dissertations & Theses Global (1034575265). Retrieved from http://ezproxy.library.tamu.edu/login?url=https://search.proquest.com.ezproxy.library.tamu.edu/docview/1034575265?accountid=7082

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Hastings, W. (2004). Emotions and the practicum: The cooperating teachers' perspective. *Teachers and Teaching, 10,* 135-148.

Haynes, J. E. S., & Miller, J. A. (2016). Transitioning from university to teaching in schools located in rural and remote settings. *Australian and International Journal of Rural Education, 26*(2), 34-48.

Ingersoll, R., Merrill, L. & May, H. (2014). *What are the effects of teacher education and preparation on beginning teacher attrition?* Retrieved from CPRE Research Reports website: http://repository.upenn.edu/cpre_researchreports/78.

Ingersoll, R. M. & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research, 81*(2), 201-233.

Jehangir, R., Williams, R. & Jeske, J. (2012). The influence of multicultural learning communities on the intrapersonal development of first-generation college students. *Journal of College Student Development, 53*(2), 267-284.

Jolliffe, I. T. (2002). *Principal component analysis* (2nd ed). New York: Springer-Verlag.

Kline, R. B. (2011). *Principles and practice of structural equation modeling*. New York, NY: Guilford.

Kumar, R. & Hamer, L. (2013). Preservice teachers' attitudes and beliefs toward student diversity and proposed instructional practices: A sequential design study. *Journal of Teacher Education, 64*(2), 162-177.

LaBoskey, V. K. & Richert, A. E. (2002). Identifying good student teaching placements: A programmatic perspective. *Teacher Education Quarterly, 29*(2), 7-34.

Ladson-Billings, G. (2000). Fighting for our lives preparing teachers to teach African American students. *Journal of Teacher Education, 51*(3), 206-214.

Le Maistre, C., & Paré, A. (2010). Whatever it takes: How beginning teachers learn to survive. *Teaching and Teacher Education, 26*(3), 559-564.

Leibold, J. & Chen, Y. (2014). *Introduction: Minority education in China. Minority Education in China: Balancing Unity and Diversity in an Era of Critical Pluralism.* Hong Kong: Hong Kong University Press.

Levene, H. (1960). Robust tests for equality of variances. In I. Olkin, S. G. Ghurye, W. Hoeffding, W. G. Madow, & H. B. Mann (Eds.), *Contributions to Probability and Statistics: Essays in Honor of Harold Hotelling* (pp. 278–292). Menlo Park, CA: Stanford University Press.

Lijie, L., Fang, W., Yunpeng, M., Clarke, A. & Collins, J. (2016). Exploring Chinese teachers' commitment to being a cooperating teacher in a university-government-school initiative for rural practicum placements. *Asia Pacific Journal of Education, 36*(sup1), 34-55.

Liu, E., Johnson, S. M. & Peske, H. G. (2004). New teachers and the Massachusetts signing bonus: The limits of inducements. *Educational Evaluation and Policy Analysis, 26*(3), 217–236. Retrieved June 15, 2009, from http://www.jstor.org/stable/pdfplus/3699576.pdf

Luo, Z., & Mkandawire, M. T. (2015). Are fruits of free normal education policy real or mythical? A critical appraisal of the free teacher education policy meant to promote rural education in China. *Journal of Education and Training Studies, 3*(3), 13-22.

Maye, D. & Day, B. (2012). Teacher identities: The fingerprint of culturally relevant pedagogy for students at risk. *Delta Kappa Gamma Bulletin, 78*(2), 19-26.

Masinire, A. (2015). Recruiting and retaining teachers in rural schools in South Africa: Insights from a rural teaching experience programme. *Australian and International Journal of Rural Education, 25*(1), 2-14.

Ministry of Education, (2007). Implementation measures of Free Teacher Education Policy enforced in normal universities under supervision of the Ministry of Education (in Chinese). http://news.xinhuanet.com/edu/2007-05/14/content_6098291.htm.

Morrison, K. A., Robbins, H. H. & Rose, D. G. (2008). Operationalizing culturally relevant pedagogy: A synthesis of classroom-based research. *Equity & Excellence in Education, 41*(4), 433-452.

Muthén, L.K. & Muthén, B. O. (1998). *Mplus User's Guide* (6th ed.). Los Angeles, CA: Muthén & Muthén.

Ng, W., Nicholas, H. & Williams, A. (2010). School experience influences on pre-service teachers' evolving beliefs about effective teaching. *Teaching and Teacher Education, 26*(2), 278-289.

OECD Observer (2016). China's urban-rural divide. Retrieved from http://oecdobserver.org/news/fullstory.php/aid/5669/China_92s_urban-rural_divide.html

Peng, W. J., McNess, E. M., Thomas, S. M., Wu, X. R., Zhang, C., Li, J. Z. & Tian, H. S. (2014). Emerging perceptions of teacher quality and teacher development in China. *International Journal of Educational Development, 34*, 77-89.

Qian, X. & Smyth. R. (2008). Measuring regional inequality of education in China: Widening coast–inland gap or widening rural–urban gap? *Journal of International Development, 20*(2), 132-144.

Qiquan, Z. (2008). Research on innovating teacher education institution in China. *Peking University Education Review, 3*, 012.

Ronfeldt, M. (2012). Where should student teachers learn to teach? Effects of field placement school characteristics on teacher retention and effectiveness. *Educational Evaluation and Policy Analysts, 34*(1), 3-26.

Rosenholtz, S. J. (1989). *Teachers' workplace: The social organization of schools.* White Plains, NY: Longman.

Rots, I., Aelterman, A., Vlerick, P. & Vermeulen, K. (2007). Teacher education, graduates' teaching commitment and entrance into the teaching profession. *Teaching and Teacher Education, 23*(5), 543-556.

Sang, G., Valcke, M., van Braak, J. & Tondeur, J. (2009). Investigating teachers' educational beliefs in Chinese primary schools: Socioeconomic and geographical perspectives. *Asia-Pacific Journal of Teacher Education, 37*(4), 363-377.

Settlage, J., Southerland, S. & Smith, L.Ceglie. R. (2009). Constructing a doubt-free teaching self: Self-efficacy, teacher identity, and science instruction within diverse settings. *Journal of Research in Science of Teaching, 46*(1), 102-125.

Shah, A. (2016). Fiscal policies for coordinated urban-rural development and their relevance for china. Public Finance and Management, 16(1), 51.

Shi, X. (2004). Urban-Rural Income Differentials Decomposition in China 1990s', master's thesis, China Center for Economic Research, Peking University, Beijing.

Siebert, C. J., Clark, A., Kilbridge, A. & Peterson, H. (2006). When student teachers struggle or fail: mentor-teachers' perspectives. Education, 126, 409-422.

Sinclair, C. (2008). Initial and changing student teacher motivation and commitment to teaching. Asia-Pacific Journal of Teacher Education, 36(2), 79-104.

Siwatu, K. (2011). Pre-service teachers' culturally responsive teaching self-efficacy forming experiences: A mixed methods study. The Journal of Educational Research, 104, 360-369.

Smith, M. D. & Glenn, T. L. (2016). "Reflecting on the reflection…": Exploring teacher candidates' assumptions of self and others through facilitated reflection. The Teacher Educator, 51(4), 314-334.

Stachowski, L. L. & Frey, C. J. (2003). Lessons learned in Navajoland: Student teachers reflect on professional and cultural learning in reservation schools and communities. Action in Teacher Education, 25(3), 38.

Stratford, K., & Cowling, A. (2016). Chinese household income, consumption and savings. RBA Bulletin, 9, 31-40.

Tabachnick, B. G. & Fidell, L. S. (2007). Using multivariate statistics (5th ed.). Upper Saddle River, NJ: Pearson Allyn & Bacon.

Tarman, B. (2012). Prospective teachers' beliefs and perceptions about teaching as a profession. Educational Sciences: Theory and Practice, 12(3), 1964-1973.

Thomas, V., Wang, Y., & Fan, X. (2001). Measuring education inequality: Gini coefficients of education World Bank Publications.

Waddell, J. H. (2013). Working with families in urban teacher education: A critical need for all students. The Teacher Educator, 48(4), 276-295.

Walker-Dalhouse, D. & Dalhouse, A. D. (2006). Investigating white preservice teachers' beliefs about teaching in culturally diverse classrooms. Negro Educational Review, 57(1/2), 69-84.

Wang, T. (2018). Rural–urban divide and identity conflicts of migrant Muslim students in northwest china. Eurasian Geography and Economics, 1-22.

Wang, D. & Gao, M. (2013). Educational equality or social mobility: The value conflict between preservice teachers and the free teacher education program in China. Teaching and Teacher Education, 32, 66-74.

Wang, J. & Li, Y. (2008). Research on the quality of compulsory education teaching in western rural schools. *Educational Research, 2,* 21-31.

Wang, J. & Paine, L. W. (2001). Mentoring as assisted performance: A pair of Chinese teachers working together. *The Elementary School Journal, 102*(2), 157-181.

Ware, H. W. & Kitsantas, A. (2011). Predicting teacher commitment using principal and teacher efficacy variables: An HLM approach. *The Journal of Educational Research, 104,* 183–193.

Weisman, E. M. & Hansen, L. E. (2008). Student teaching in urban and suburban schools perspectives of Latino preservice teachers. *Urban Education, 43*(6), 653-670.

Wiggins, R. A., Follo, E. J. & Eberly, M. B. (2007). The impact of a field immersion program on pre-service teachers' attitudes toward teaching in culturally diverse classrooms. *Teaching and Teacher Education, 23,* 653-663.

Yang, Y. Wang, Z. (2007). Free normal education: policy ideals, real-world conflicts, and their solutions. *Tsinghua Journal of Education, 28*(3), pp. 49–53.

You, Z. & Jia, F. (2008). Do they learn differently? An investigation of the pre-service teachers from US and china. *Teaching and Teacher Education, 24*(4), 836-845.

Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college-and university-based teacher education. *Journal of Teacher Education, 61*(1-2), 89-99.

Zhang J. B. (1995). Teacher preparation in China. In J. Lane (Ed.), *Ferment in Education: A Look Abroad* (pp. 148-156). Chicago: University of Chicago Press.