# Educational Injustice in a High-Stakes Testing Context: A Mixed Methods Study on Rural Migrant Children's Academic Experiences in Shanghai Public Schools

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This mixed method study analyzes rural migrant children's academic experiences in two Shanghai public schools when 2012 PISA scores were administered. It contributes empirical evidence on how *hukou* status shapes educational inequality in contemporary China. Since rural migrants are ineligible for the high-stakes test for Shanghai's senior secondary admission, teachers diverted resources towards urban children at the expense of rural migrants, regardless of academic potential. Such "successful" teaching practices to maximize ranking motivated excessive resource provision to the detriment of urban youth's development. This article argues that it is only possible to understand these patterns through an inequality theory that explicitly considers the diminished integrity of teaching in high-stakes testing contexts. The framework explains educational injustices when the moral assumption of "good" teaching to benefit a child is no longer valid, with implications on the growing global emphasis on high-stakes testing.

# Introduction

The education of rural migrant children has emerged as one of the most pressing problems facing contemporary China. Policy makers are concerned that political legacies from the 1950s threaten to undermine its social stability and economic growth (Lim 2018). The nation faces the formidable challenge of integrating a population of rural migrant youth who were either born in the city or brought to the city by their parents (Ferrar 2016). Under the *hukou* system, a hereditary household registration system that determines Chinese citizens' access to public services (e.g., education), these young people face educational barriers and may be at risk of developing into an urban underclass. However, rural migrant children's educational access varies across China's municipalities that each develop distinctive *hukou* reforms (Ma 2019).

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#### EDUCATIONAL INJUSTICE IN HIGH-STAKES TESTING CONTEXT

The question of whether rural migrant children can access educational opportunity associated with urban public schooling received tremendous attention in 2009 and 2012, when Shanghai stunned the world with its top PISA scores (Dillon 2010; Loveless 2014). Since then, other cities/provinces with significant migrant children populations have joined Shanghai to represent China in PISA 2015 and 2018 (2015: Shanghai, Beijing, Jiangsu province, Guangdong; 2018: Shanghai, Beijing, Jiangsu province, Zhejiang province). Importantly, Western and Chinese scholars assert the hukou system persists in excluding migrant children from educational opportunities in Shanghai and the other PISA-participating cities/provinces despite reforms (Oian and Walker 2015; Xu and Dronkers 2016). These scholars identify Shanghai, Beijing, Jiangsu province, Guangdong province, and Zhejiang province as among the migrant-receiving locales implementing educational restrictions, with plausible implications of excluding rural migrant children from PISA's sampling of 15-year-olds (Chan and Ren 2018; Harris and Jones 2019; Ma 2019).

This mixed methods study provides a unique glimpse into two Shanghai middle schools in which urban and rural migrant children were enrolled when the 2012 PISA was administered. This article does not discuss whether the PISA scores were representative of 15-year-olds living in Shanghai. However, the Shanghai data provides a unique snapshot to reflect on the broader issue that emerged since 2009 and persists with the 2015 and 2018 PISA participation of additional China's cities/provinces possessing sizeable migrant children populations: how and to what extent *hukou* shapes educational inequality in urban public schools.

First, I use Shanghai schooling data to argue that our conceptual tools to understand and redress educational inequalities may no longer be adequate in high-stakes testing contexts.<sup>1</sup> Stratification studies in high-stakes and nonhigh-stakes testing systems have predominantly applied a resource-centered approach (Gillborn and Youdell 2000; Booher-Jennings 2005; Oakes 2005). However, in the United States, the United Kingdom, and other contexts in which high-stakes testing has recently developed, such an approach overlooks the moral shift in schools from "good" teaching (benefiting the child) to "successful" teaching (increasing student achievement, even if this is detrimental to a child's development) (Santoro 2011). As policy makers in the United States and the United Kingdom push for high-stakes testing, Shanghai policy makers have implemented school reforms to weaken its influence (Cravens et al. 2012). Data from Shanghai, with its long history of high-stakes testing, enriches our current conceptual approach by illuminating educational injustice when the moral assumption of "good" teaching no longer

<sup>&</sup>lt;sup>1</sup> "High-stakes tests" are defined as tests with "real or perceived consequences for students, staff, or schools" (Chapman and Snyder 2000, 458).

holds. Recentering our discussion on the moral dimension of teaching, I propose a typology that differentiates between the educational injustice that emerges when an object (e.g., ranking) or person (e.g., child) is the purpose of schooling. This approach illuminates the teaching-related injustice against students that the predominant inequality framework overlooks.

I also problematize the predominant conception of "educational equity" for China's rural migrant children in existing academic and policy circles. As *hukou* policies render rural migrants ineligible for the high-stakes, senior secondary entrance exam (*zhongkao*) in Shanghai, Shanghai teachers have intentionally "diverted" instructional resources toward urban children who "count" at the expense of rural migrant students who do "not count." However, the "quality" education that urban children receive should no longer be considered the educational equity model for rural migrant children. When maximizing ranking is the purpose of "successful" teaching, teaching itself constitutes a form of injustice to all students.

#### Shanghai Background

Examining rural migrant children's academic experiences in Shanghai public schools provides a unique opportunity to examine schooling and inequality in a high-stakes testing context. Under the existing hukou regime, 34.26 million children lack hukou status in their cities of residence and face barriers to quality education (UNICEF 2017). The hukou system, established by the Chinese Communist Party in 1958, localized social welfare services to an individual's registered hukou (Cheng and Selden 1994). In practice, the hukou regime operated as an internal passport system that prevented those without *hukou* in their place of residence from accessing education. The market reforms of the late 1970s loosened hukou restrictions on mobility and precipitated the migration of 79 million rural residents to cities. Since the 1990s, growing numbers of migrants have been raising families in cities (Chen and Liang 2007). The persistence of *hukou* barriers that exclusively allocate urban educational resources to urban citizens poses a challenge to the growing numbers of migrant children, who lack urban rights to public schooling. Consequently, migrant children receive an "informal" education in migrant schools (Yu 2018). These unlicensed institutions, which emerged in the 1990s as an affordable schooling option with minimal enrollment barriers, provide migrant children with an inferior education (Lu and Zhou 2013).

In Shanghai, *hukou* reforms in effect from 2008 allowed migrant children to attend public schools for compulsory education, thus providing limited access to Shanghai's public goods regime (Hewitt et al. 2010). However, restrictive municipal policies toward migrant children's post-compulsory education intersect with high-stakes testing pressures to create a problem for public schools: enrolling rural migrant youth who are ineligible for the high-stakes exam that has grave consequences for schools. In Shanghai's highly competitive school system, teachers face tremendous pressure to prepare students for the Shanghai senior secondary entrance exam, *zhongkao* (Cravens et al. 2012). Due to Shanghai's postcompulsory educational policies, rural migrant children are excluded from the Shanghai *zhongkao* and only eligible for the *zhongkao* in the rural community where their *hukou* is registered (Koo et al. 2012).<sup>2</sup> Since Shanghai *zhongkao* scores are the only criteria by which Shanghai middle schools are ranked annually, this study's urban teachers are strongly motivated by intramunicipal competition on student achievement at the interschool level. Thus, although migrant children are entitled to attend Shanghai public schools for compulsory education, the schools have little incentive to invest in their academic development.

Previous studies of the academic performance of Chinese migrant students in public schools suggest that schools distribute instructional resources inequitably along *hukou* lines. In Beijing, some teachers refuse to grade migrant children's exam papers within mixed urban-migrant classrooms (Kwong 2011). School policies and practices have also contributed to the underrealization of migrant children's academic potential. In Wuhan and Shanghai, public schools at the elementary and middle school level segregate migrant children from their urban classmates and assign the least qualified teachers to these disadvantaged students (Qian 2010). Such accounts suggest that public schools provide migrant children with a less favorable learning context than their urban classmates (Kwong 2011). Unfortunately, survey-based studies in public schools have not examined the learning processes of urban and rural migrant students (Lu and Zhou 2013).

Importantly, research on rural migrant children's education has overlooked high-stakes testing, despite the dominance of exam-oriented teaching in China's education system (Cravens et al. 2012). The few studies that situate rural migrant children's academic experiences within the urban education system suggest that high-stakes testing is a critical factor in rural migrant children's academic experiences in public schools (Wei and Hou 2010; Hu and West 2015). Ineligibility for high-stakes examinations and consequent academic neglect of migrant students played a critical role in two Shanghai schools where migrant students conceptualized "care" as teachers investing in academic development (Yiu 2016). The relationships (if any) between highstakes testing, school investment in students' academic development, and *hukou* status merit systematic attention.

<sup>&</sup>lt;sup>2</sup> Future references to "zhongkao" refer to Shanghai zhongkao, unless otherwise stated.

# Conceptual Framework: Recentering Educational Inequality on the Moral Dimension of Teaching

Within the same school, educators can provide different learning environments and opportunities for different groups of students.<sup>3</sup> Educational stratification studies predominantly apply a resource-centered approach, which conceptualizes schooling as an array of instructional resources (Bidwell and Kasarda 1980; Gillborn and Youdell 2000; Oakes 2005). While an empirical focus on resource allocation is important, it only provides a partial insight into educational inequality by reducing teaching into a technical act.

In actuality, teaching is "unavoidably moral in nature" (Sanger and Osguthorpe 2011, 571). As teaching is a moral practice infused with values (Anderson-Levitt 2002; Santoro 2013), resource allocation is integrally linked to teaching values, among which one of the most fundamental is the moral purpose of schooling (Biesta 2009). Central to the integrity of teaching and the teaching profession is the moral assumption that teachers apply "good" teaching practices (Fenstermacher and Richardson 2005), using "expert knowledge and specialized skills" to promote a child's welfare (ILO/UNESCO 1966).

A resource approach that overlooks the moral dimension of teaching undermines scholars' ability to recognize educational injustice in schools when, in response to testing pressures, the moral assumption of "good" teaching no longer holds. In high-stakes testing contexts, teachers increasingly face pressure to teach in ways that transgress their core professional values (Santoro 2013). In Shanghai, teachers have applied "successful" teaching practices that aimed to maximize ranking even when detrimental to children's development (Fenstermacher and Richardson 2005). This type of teaching constitutes a form of injustice to all students—urban and rural migrant. Unfortunately, the resource allocation framework's inability to reveal the diminished integrity of teaching (Santoro 2013) results in an incomplete understanding of inequality within high-stakes testing contexts, as I will show in my Shanghai analysis.

In the next section, I expand the conceptual tools on inequality by proposing an alternative approach that enriches our understanding of stratification and schooling by including the moral dimension of teaching.

#### Educational Injustice in Non-High-Stakes Testing Contexts

The predominant stratification model examines the degree to which school systems organize and sort students by ability, or "manage pupil's [academic] heterogeneity" (Dupriez et al. 2008). According to the OECD, "Ability grouping refers to the practice of sorting students within the schools they attend based on ability or prior performance, most often with the objective of better meeting students' needs by creating a more homogeneous learning environment. Ability grouping may occur within or between classes

<sup>&</sup>lt;sup>3</sup> This study examines stratification within, not between, schools.

in a given school" (OECD 2016, 176). In theory, ability-based groups receive access to instructional resources appropriate to students' academic needs. However, extensive international literature demonstrates that students in lower-ability groups often benefit less than those in higher-ability groups do (Oakes 2005; Schofield 2010; Van Houtte et al. 2012). Consequently, ability grouping is seen as an institutional practice that stratifies students and undermines equity (OECD 2013). International organizations (e.g., OECD), cross-national tests (e.g., PISA), and scholars are thus interested in the extent to which schools group students by ability within and between classrooms (Dupriez et al. 2008; Ferrer-Esteban 2016). For example, the OECD developed an "ability grouping within schools" index to measure within-school horizontal stratification (2013).

Importantly, the predominant model rests on two moral assumptions. First, it assumes that teaching practices are "good." Students are the purpose of schooling and the main beneficiaries of teaching, which aims to realize their academic potential (Santoro 2011). Second, on the assumption that teaching is done "in the best interests of the students" (Oakes 2005, 4–5), any tracking-induced achievement gap is assumed to be unintentional. Thus, the social organization of schools (e.g., tracking) and consequent between-track differences in teaching and allocation of instructional resources aim to meet the perceived individual needs of students (OECD 2013). Despite debate on whether all students benefit from tracking practices (Gamoran 2010; Schofield 2010), the motivation is "well intended" (Oakes 2005, 5), and ideally, all students benefit.

However, the predominant understanding of inequality does not explain the inequality patterns in the two investigated Shanghai schools. Rather than allocating resources based on students' academic ability, a different inequality type has emerged in response to the *zhongkao*. Resource allocation patterns are associated with "successful" teaching practices, which prioritize ranking above the well-being of all students—urban and rural migrant. I thus propose a model that illuminates inequality processes in Shanghai's high-stakes testing context when the moral assumption of "good" teaching no longer holds.

# Educational Injustice in High-Stakes Testing Contexts

To examine the educational injustice that emerges when "successful" teaching practices are at work in high-stakes testing contexts, I draw on sociological theories of public measures (e.g., ranking evaluations), which investigate commensuration as cultural processes that transform "qualities to quantities that share a metric" (Espeland and Sauder 2007, 16). I apply this concept to illuminate both the "often-ignored moral aspects of public measurement" (Espeland and Sauder 2016, 8) and the education-specific ways in which high-stakes testing pressure influences educational inequality by differentiating students' academic experiences within the same school. In investigating "successful" teaching practices and consequent resource allocation patterns as a type of commensuration practice, two distinct forms of educational injustice emerge when ranking is the focus of teaching. First, teaching itself is an act of injustice to rural migrant and urban youth in Shanghai schools. As commensuration processes "change our relation to what we value" (Espeland and Stevens 1998, 319), I examine the diminished integrity of teaching when Shanghai educators intentionally invest in a child's academic development for ranking purposes.<sup>4</sup> As maximizing ranking is prioritized, teachers intentionally allocate instructional resources in ways detrimental to rural migrant and urban students' development.

Second, teachers admitted to contributing to the widening *hukou*achievement gap between urban and rural migrant students. As commensuration processes can "alter how we invest in things and people" (Espeland and Stevens 1998, 319), both Shanghai schools responded to ranking pressures by no longer investing in a child's academic potential for its intrinsic value. Rather, teachers prioritized the academic development of particular children according to perceived ranking benefit. As *hukou* policies excluded rural migrants from Shanghai *zhongkao* participation, teachers "redistributed resources . . . to optimize their rank" (Espeland and Sauder 2007, 25) by intentionally diverting instructional resources toward urban children who "counted" at the expense of rural migrant students who did "not count."

# Method

To examine the extent and ways in which *hukou* status shapes educational inequality in public schools, I investigated why and how instructional resources were distributed by *hukou* status in two Shanghai schools. I conducted a mixed methods analysis of resource allocation, that is, the decision-making process by which educators in two Shanghai schools invested resources in children's academic development.

#### City and School Selection

I chose Shanghai because of its large population of rural migrant children and its socially progressive policies toward rural migrants. To explore rural migrant students' academic experiences in Shanghai public middle schools, I strategically chose two schools that are comparable across student demographics and academic ranking but differ in the extent to which they prioritize rural migrant children's education (table 1). The two schools are close to each other and draw from the same student population. However, school S violated municipal policy by segregating rural migrants into *hukou*-based

<sup>&</sup>lt;sup>4</sup> This article focuses on the moral dimension of teaching, examining how high-stakes tests distort core teaching values, rather than the effects on curriculum and instruction.

	School I	School S
Total number of students	484	602
Hukou status of students (%):		
Urban	60	40
Rural migrant	40	60
Total number of seventh-grade students	119	145
Hukou status of seventh-grade students (%):		
Urban	61	38
Rural migrant	39	62
Sorting of migrant children	Integrated	Segregated
Homeroom type:	Ability	Hukou status
High track	"High ability"	"Urban"
Low track	"Low ability"	"Rural migrant"
School rank in district (out of 50)	20	22

 TABLE 1

 Descriptive Traits of Middle Schools

homerooms. In contrast, school I sorted rural migrants into integrated homerooms, despite urban parents' opposition.

#### Study Design

I investigated instructional resource allocation in two public middle schools during 2011–12 and follow-up visits in 2013. I conducted in-depth, primarily qualitative case studies of the two schools because there is a notable lack of research on learning processes within these hard-to-access state institutions. During the academic year, I visited each school for two full days every week. In both schools, I was a seventh-grade oral English teacher.

The consequent mixed methods study applied a "concurrent convergent design" (Creswell and Clark 2018), an effective means of corroborating the findings of qualitative and quantitative analysis. Using a primarily qualitative approach ("QUAL + quan") to concurrently collect both qualitative and quantitative data, I sought a fuller understanding of resource allocation by drawing on the strengths of quantitative methods to overcome the weaknesses of qualitative methods. I separately analyzed the qualitative and quantitative data, then integrated the results to optimize analytical rigor on how and why *hukou* status shaped resource allocation in both schools. All of the survey and interview data were collected in Mandarin.

#### Qualitative Phase

Data collection.—My data sources were participant observations and interviews with administrators, teachers, and students. First, I conducted observations in two public middle schools. As a volunteer English teacher, I built trust among students, teachers, and administrators; observed classes; attended faculty meetings; and immersed myself in the richness of daily school life. To understand the salience of *hukou* in the distribution of resources, I observed how administrators and teachers discussed teaching in relation to *hukou* status, school policies, and students. I also observed teacher and student interactions. Second, I conducted 10 administrator interviews (six at school I, four at school S), and 20 teacher interviews (10 at school I, 10 at school S) to collect demographic and background information and opinions on teaching philosophy and practices at the school. I also conducted 16 student focus groups (45 students) that ranged in composition (*hukou* status, gender, and achievement) to reflect the diversity of students' schooling experiences across seventh-grade homerooms. These interviews collected demographic and educational background information as well as academic and social experiences. I further interviewed 23 students, selected to show the diversity of classroom experiences across *hukou* status, gender and achievement, to gain a deeper understanding of school and classroom processes. Semistructured protocols were used for the interviews, which were taped and transcribed verbatim.

Analysis.—I applied modified grounded theory (Charmaz 2014) to analyze transcripts and documents to extract key emerging themes regarding how and why schools invest instructional resources (or not) in a child's academic development. Along with field notes, the transcribed interviews were systematically coded for emergent themes pertaining to teaching, resource allocation, *hukou* status, achievement, academic potential, and *zhongkao*. I paid attention to the role of students' achievement and *hukou* status in shaping resource allocation practices within both schools. Importantly, *zhongkao* was consistently mentioned as a critical factor in resource allocation decisions.

In the second stage, I identified two instructional resources that educators differentially allocated to migrant and urban children who attended the same school: access to high-track homerooms and access to outside-classroom instructional time. While my coding was informed by the literature on school resources and achievement (Bidwell and Kasarda 1980; Oakes 2005), I allowed the information on learning resources to emerge from school observations and teacher interviews. For example, high-track homeroom access emerged as a critical resource because the homeroom organizes a student's schooling experiences in China. Students spend their school day with the same classmates in the homeroom, while teachers rotate in to teach; with little chance to change homerooms, the homeroom determines a student's teachers and classmates throughout his/her years in that middle school. In the final analysis stage, I coded each resource's relationship with ranking and students' hukou status in more detail. I investigated teachers' pedagogical rationales for how resources contribute to ranking, and how these rationales then shape students' access to/exclusion from resources. Table 2 illustrates the "intellectual" and moral" dimensions observed.

# Quantitative Phase

*Data collection and analysis.*—To examine each school's patterns of sorting students into homeroom tracks by *hukou* status and prior achievement, I collected data on student *hukou* status, the composition of homeroom tracks,

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	CODIN	G SCHEME	
		"Teaching Practice"	Umbrella Code
Instructional Resource	Definition	"Intellectual Rationale" Code (Student Cognition and Learning)	"Moral" Code (Who Benefits from Resource Access?)
Homeroom learn- ing climate	Learning climate that homerooms provided for students	Peer compositional effects	Urban students
In-school outside- classroom in- structional time	Instructional time in addition to the formal 40-minute class period	Establishing strong academic foundation	Maximizing ranking

TABLE 2Coding Scheme

and prior achievement. The achievement data originated from the first semester final test (encompassing Chinese, English, and mathematics) that the education office administered to all seventh-grade students in the district during 2011–12.<sup>5</sup>

I performed a Pearson chi-square test to reveal the relationship, if any, between homeroom track placement (low or high track) with a student's *hukou* status and prior achievement quintile.<sup>6</sup>

To determine between-track differences in homeroom learning quality, I collected survey data from seventh-grade teachers and students in both schools. First, I distributed a teacher survey on time allocated to (1) instruction, (2) routine, (3) relaxation, and (4) discipline in a typical 40-minute lesson in each homeroom. I derived the questionnaire from seminal work on tracking (Oakes 2005) and teacher interviews in both Shanghai schools.

Second, seventh-grade students completed a survey on the disciplinary climate in their homeroom. Based on a validated and reliable instrument administered in rural China (Gansu Survey of Children and Families 2004), I used student reports on five items regarding students' behavior (e.g., disrupting class) to create a homeroom climate scale (Cronbach's alpha = 0.7882). For each question, students indicated on a Likert scale how often the behavior occurred. The overall score was calculated by summing student responses and then dividing by the number of items. High values signaled students' perception of frequent disruptive behavior in the homeroom.

*Positionality.*—My Fulbright affiliation and sponsorship by a Chinese academic facilitated my access to both public schools as an English teacher with

<sup>&</sup>lt;sup>5</sup> Achievement scores from elementary school graduation exam, which school I and school S leaders utilized for tracking assignments upon students' initial enrollment, were inaccessible. Importantly, student achievement patterns from the seventh-grade district test reflect the *same* homeroom patterns identified by school leaders on sorting students from elementary school graduation scores, thus suggesting high correlation between scores from the elementary graduation exam and seventh-grade district exam. I thus use these district exam scores as prior achievement measures.

<sup>&</sup>lt;sup>6</sup> For each school, district final test scores from seventh-grade students (urban and rural migrant) were divided into five achievement groups (quintiles), with equal numbers in each quintile; the lowest 20% comprised quintile 1.

principal approval. Although both schools prepared a desk for me in the teachers' office, formality and distance initially characterized my relationship with the teachers, who were wary of my presence as an American researcher.

This relationship shifted slowly during the 2011–12 academic year. My identity and professional experiences played a key role in building rapport at both schools. Although I was born and raised in the US, my Chinese heritage and ability to speak Mandarin helped me to build trust among teachers and administrators. As a former high school teacher in the United States, I gained respect from Chinese teachers and administrators. My English expertise was sought after by teachers. Eventually, my role as an English teacher and involvement in after-school events strengthened my relationships at both schools, which was critical to developing emic insight into the politically sensitive topic of how and why *hukou* status matters in public schools. Consequently, I acquired school approval to distribute teacher and student surveys in spring 2012. Trust also ensured that the survey responses were "truthful," as one homeroom teacher instructed her students when she realized the surveys were for my research and not school evaluation.

Potential bias in data collection and analysis may have arisen from my "outsider," non-Chinese native status and strong ties with school participants. Specifically, only one teacher shared openly about prioritizing local students in response to fear of migrants taking away Shanghai educational opportunities. It is plausible other teachers' actions were similarly motivated by nativist fears but chose not to share with me as an "outsider." Moreover, I decided to interpret school patterns that prioritized local students' academic development as an *institutional* response to high stakes testing pressures, rather than nativist fears. While this decision emerged after triangulating multiple data sources, my strong ties may have inclined perceiving teachers in a more positive light during data analysis.

# Findings

#### Part 1: The School Contexts

At first, I had difficulty distinguishing between rural migrant and urban children. The teachers agreed that since all of the children wore school uniforms and were Han Chinese, it was difficult to differentiate between them.<sup>7</sup> However, a school S teacher informed me about "one crucial difference between rural migrant and urban kids. . . . Rural migrant kids are less important because of the *zhongkao*. They can't take the *zhongkao* test." A seventh-grade teacher leader in school I noted that the enrollment of rural migrant youth alongside urban youth led to a "complicated situation . . . some

<sup>&</sup>lt;sup>7</sup> The migrant children from my study do not differ from urban youth in terms of language or other cultural markers. Teachers recognize locality status because this information is provided by the administration and publicly shared knowledge (e.g., teachers asking nonlocal students to raise hands).

students can take the high-stakes exam (urban), while other students (rural migrants) are excluded." The same teacher leader then elaborated on the "evaluation problem" facing both schools. As the purpose of middle school is to "prepare the student for the *zhongkao*," schools face tremendous pressure to raise their ranking according to Shanghai *zhongkao* results.

In response to *zhongkao* pressures, both schools differentiated students into two ranking-oriented categories: "those that counted" (urban) and "those that did not count" (rural migrants). In both schools, educators systematically prioritized the learning needs of urban students, sometimes at the expense of rural migrant students' academic development.

# Part 2: "Rural Migrant Children Don't Count. They Can't Take the High School Entrance Exam"

Here I spotlight a finding that cannot be explained by the predominant inequality model: both schools systematically sorted high-achieving migrants into low track homerooms. I utilize Shanghai data to rethink the predominant inequality framework and propose an alternative model.

The puzzle: The systematic sorting of high-achieving migrant youth into low track homerooms.—According to the predominant inequality model, both Shanghai schools would sort high-achieving rural migrant students into high-track homerooms.<sup>8</sup> Such homerooms would provide learning environments appropriate to developing their academic potential, as high-achieving rural migrant students would be sorted with comparable high-achieving classmates. However, quantitative analysis on the relationship between homeroom track placement with a student's *hukou* status and prior achievement revealed a puzzle: both schools sorted high-achieving rural migrant children into low-track homerooms. As shown in table 3, there was no statistical relationship in either school between rural migrants' sorting into low- or high-track homerooms and their prior achievement. In other words, schools did not sort rural migrant students into tracks based on prior achievement.

The schools' systematic sorting of high-achieving rural migrant students into low track homerooms is even more striking when contrasted with the sorting of urban students. As table 4 shows, in school S, all urban students were tracked into high-track homerooms; in school I, urban students were tracked into high- or low-track homerooms based on prior achievement.

<sup>&</sup>lt;sup>8</sup> In both schools, interviews with teachers, administrators, and students revealed two sorting rationales for rural migrant children: social connections (*guanxi*) and ranking considerations. My analysis focuses on the academic experiences of rural migrant children who were sorted without social connections (*guanxi*). As all rural migrant children who were sorted into the high tracks relied on *guanxi* in both schools (Yiu, forthcoming), the pattern emerges of both schools sorting high-achieving rural migrant youth into low tracks. For rural migrant children sorted into high tracks, teachers provided out-ofclassroom instruction when administered to the whole-class (e.g., *fudaoke*), rather than individually or in small groups.

DISTRIBUTION OF MIGRANT STUDENTS INTO HOMEROOM TRACKS BY ACHIEVEMENT AND SCHOOL	

School I				School S		
Achievement Quintile	High-Ability Track	Low-Ability Track	$\chi^2$	Urban Track	Rural Migrant Track	$\chi^2$
1 (lowest)	3	11	5.95	1	24	6.81
2	0	9	0	15		
3	2	7	1	16		
4	3	3	3	13		
5 (highest)	3	5	3	11		

\* P < .05.

\*\* P < .01. \*\*\* P < .001.

This leads us to the question, what type of learning environment did high-achieving migrant children experience in low-track homerooms? High-achieving migrant children in schools I and S were systematically sorted into low-track homerooms with a lower quality learning climate than the higher track homerooms.<sup>9</sup> Specifically, low-track homerooms in both schools had a more chaotic disciplinary climate and less in-class instructional time. According to seventh-grade student surveys in both schools (table 5), students in low-track homerooms perceived more frequent disruptive behavior compared to high-track homerooms.<sup>10</sup> High positive values signal students' perception of frequent disruptive behavior in homeroom. Reinforcing student perceptions, the seventh-grade teacher survey revealed that discipline represented a larger proportion of class time in the low-track compared with the high-track homerooms (table 6). More frequent disciplinary incidents in the low-track homerooms also reduced the instructional time in the 40-minute class period.

My fieldwork confirmed these patterns. I observed a low-track school I homeroom teacher use substantial class time to publicly discipline a male student for disrespectful behavior toward her. I also witnessed low track homeroom teachers use instructional time to collectively discipline class for not paying attention. In contrast, my observations in high track homerooms revealed teachers rarely encountering disruptive behavior; discipline ranged from: sending a child outside to complete homework, to requiring a child to stand up if not paying attention to lesson.

<sup>&</sup>lt;sup>9</sup> While I recognize teacher responses to student differences (i.e., abilities, interests) as an appropriate source of between-track instructional variation, I focus on classroom differences in learning opportunities that are *institutionally* created.

<sup>&</sup>lt;sup>10</sup> My fieldwork strongly suggests the lower tracks' disruptive behavior is socially constructed by students and teachers. Based on teacher and student interviews, teachers' low expectations and negative perceptions of low track homerooms significantly contributed toward students' misbehavior during class.

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	School I			School S		
Achievement Quintiles	High-Ability Track	Low-Ability Track	$\chi^2$	Urban Track	Rural Migrant Track	$\chi^2$
1 (lowest)	1	9	37.42***	4	0	
2	4	11		13	0	
3	12	3		12	0	
4	16	2		12	0	
5 (highest)	15	0		13	0	

 TABLE 4

 Distribution of Urban Students into Homeroom Tracks by Achievement and School

\* P < .05.

\*\* P < .01. \*\*\* P < .001.

An alternative paradigm to explain the puzzle: Inequality arising from "effective" teaching.—To explain the puzzle of high-achieving rural migrant students being sorted into low-track homerooms, I draw on qualitative interviews with educators to propose that students are sorted into homerooms according to the perceived ranking benefit to schools. Restrictive postcompulsory educational policies require rural migrant children to pursue their educational aspirations by taking the *zhongkao* in their rural hometowns where their *hukou* was registered (Koo et al. 2012). In response to high-stakes testing pressures from the Shanghai *zhongkao*, Shanghai educators thus divided students into two groups: those who "count" (urban) and those who "don't count" (rural migrant). Such labels reflected a child's Shanghai *zhongkao* eligibility and determined whether the school prioritized the academic development of particular student groups.

In both schools, homeroom sorting was a strategy that teachers and administrators utilized to maximize ranking. As students within a homeroom remain with the same classmate cohort throughout middle school (grades 6– 9), homeroom sorting allocates a critical instructional resource for students: learning climate. Reflecting the views of most teachers and leaders in both

School	Classroom Disruption Scale
I:	
High-ability track, HR 1	05
High-ability track, HR 2	81
Low-ability track, HR 3	.034
Low-ability track, HR 4	.60
S:	
Urban track, HR 1	018
Rural migrant track, HR 2	.276
Urban track, HR 3	74
Rural migrant track, HR 4	.25
Rural migrant track, HR 5	.6345

 TABLE 5

 Student Perception of Classroom Disruption, by Homeroom

NOTE.—HR = homeroom.

Homeroom Type	Socializing (%)	Discipline (%)	Instruction (%)	Routine (%)
School I:				
Low track	5	9.4	73	12.6
High track	1.9	4.1	92.5	1.5
School S:				
Low track	7.7	6.7	77	8.6
High track	4.3	5.8	85	4.9

 
 TABLE 6

 Seventh Grade Teacher Reports of Time Allotment in a Typical 40-minute Lesson, by Homeroom Track and School

YIU

NOTE.—Measures for socializing, discipline, instruction, and routine were each calculated as the average of teacher scores for each homeroom type, high or low, in each school. Individual measures for each homeroom can be provided upon request.

schools, Zhao<sup>11</sup> (school I administrator) believed that the "school provides students with a certain [learning] environment through the homeroom. In a class, people influence people. So if a student is good, this will help create a good study atmosphere." Referring to peer compositional effects, teachers in both schools recognized "class learning as a collective activity, where . . . students resource one another" (Resh and Dar 2012, 931).

Next I illuminate each school's rationale for sorting high-achieving rural migrant children into low-track homerooms. Educators in both schools applied their pedagogical knowledge of peer compositional effects to maximize ranking with morally troubling consequences. They admitted contributing to a widening *hukou*-achievement gap in response to ranking pressures by intentionally prioritizing the academic development of low-achieving students who "counted" (urban youth), even at the expense of high-achieving children who "didn't count" (migrant youth). Ultimately, this illustrates a rationale fundamentally different from the predominant model or *hukou* bias for divergent academic experiences among students in the same school: maximizing ranking as the purpose of education.

School S High-achieving rural migrant youth, like Didi, were sorted into low-track, "nonlocal" homerooms. Explaining why school S sorted students along *hukou* lines, Didi said that the school leaders "separate the nonurban and urban kids because the Shanghai urban kids can ultimately take the [*zhongkao*] test, but the non-urban kids can't. The school wants to prepare and teach the Shanghai kids well, to raise the school ranking without taking nonurban kids into consideration." Reinforcing Didi's opinion, a school S administrator explained the school decision to segregate as based on recognition that high-achieving rural migrant

<sup>&</sup>lt;sup>11</sup> All names are pseudonyms.

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youth, like Didi, were likely to "disrupt" the homeroom learning climate for the remaining urban students by leaving for their hometown: "At first, our school integrated the kids together: urban and rural migrant. Every semester, however, some rural migrant kids would leave, which disrupted the homeroom class and made it harder to manage the remaining urban students. So we decided to divide students by *hukou* into homerooms." Consequently, the school decided to violate municipal policy by segregating students along *hukou* lines.

In actuality, school S was concerned about migrant students' departure having a negative effect on remaining local students. As high-achieving rural migrants would inevitably leave for their hometowns to continue their post-compulsory education, the learning climate of their homeroom would be "disrupted" for the remaining students. Consequently, the schools made little effort to sort high-achieving rural migrant students into high-track homerooms with urban students. Admitting that many high-achieving rural migrant students, like Didi, were sorted into low-track, "rural migrant" homerooms that diminished their academic growth, a school S seventh-grade math teacher commented, "In general, the [low-track] homeroom students' attitude toward studying isn't good. They're very noisy and not well-behaved . . . It's hard for students like Didi, the homeroom student leader, to concentrate and study in that type of environment. If she and these other students were in the [high-track] 'urban' homeroom, they would do better." This reflected the perspective of many other seventhgrade teachers at the school.

School I Leaders intentionally sorted high-achieving rural migrant children into low-track homerooms to promote low-achieving urban students' academic development. School I's seventh-grade head teacher, who was responsible for student sorting, explained the rationale for this decision: "When we sort the students, we only look at test scores. We don't consider study attitudes or study habits. There are differences between homerooms 3 and 4 and homerooms 1 and 2. We put all the Shanghai good students with talent and a strong [academic] foundation in [high-track] homerooms 1 and 2. So the better Shanghai students are in homeroom 1 and 2. The remaining Shanghai students with a weaker academic foundation are put in [low-track] homerooms 3 and 4, but the rural migrant students are better students. Having [academically] strong rural migrant students will help spur on and raise the

achievement of the low-achieving Shanghai kids in the same class." High-achieving rural migrant children's academic excellence and perceived high intrinsic motivation are thus utilized as an instructional resource to contribute toward a positive homeroom learning environment that ultimately benefited urban students. Other seventh-grade teachers reinforced this view.

The contrast in school I's sorting patterns among urban students and rural migrant students is striking, particularly considering the role of achievement and hukou status. Urban students in school I were intentionally sorted into the appropriate homeroom track based on prior academic marks (see table 4). Such sorting was motivated by the desire to enhance their academic development by providing them with access to an appropriate learning climate. For example, a school I homeroom teacher observed that integrating high-achieving migrant students into low-track homerooms fostered a more positive, "stimulating," and "competitive" learning climate. Focusing on the peer compositional benefits to local students from interacting with high-achieving migrant classmates, she explained that "one of the student monitors, a strong all-around [rural migrant] student, is able to help some of the slower Shanghai students" in her low-ability homeroom class. Her view was reinforced by most of the other teachers and leaders. In contrast, rural migrant youth were not placed in the appropriately challenging homerooms (see table 3). The educational significance of hukou in terms of Shanghai zhongkao exclusion is striking. Due to zhongkao exclusion, neither school considered developing the academic growth of high-achieving rural migrant students despite high test scores indicating academic potential. These students were thus sorted into homerooms at the expense of their own academic development.

#### Part 3: "The Most Important Students Are the Shanghai Ones"

While appropriate homeroom placement privileges urban students compared with their rural migrant peers, both schools' label of "those who count" overlooks a hidden, but important reality: ranking considerations supersede urban students' developmental needs. Here I highlight teaching itself as a form of injustice to urban students. In this section, I show how the allocation of in-school outside-classroom instructional time undermines urban children's healthy development in both schools.

In the high-stakes testing context of both schools, urban youth face a different challenge to that of their rural migrant classmates: *zhongkao* preparation. According to a school I homeroom teacher, "The urban students need to meet a lot of requirements, but the rural migrants don't. I focus much more on the urban students, since rural migrant students whose *hukou* is not in Shanghai cannot take the *zhongkao*. Rural migrants have to go back to their hometown . . . so I will work harder on the urban students." Her perspective reflected those of teachers from both schools.

Importantly, in-school outside-classroom time emerged as an important source of instructional time that was inequitably distributed by *hukou* status in school. Previous research shows the importance of instruction during formal instructional time (Fuller et al. 1994; Bruns and Luque 2014) and private supplemental tutoring out-of-school (Baker et al. 2001; Bray and Kobakhidze 2014). This study identifies a new source of in-school instructional time in Asia: teacher activity outside formal classroom time. This activity consists of two main types: *zhua*, or tutoring of small groups of one to three students, and large groups of students receiving additional classroom teaching (see table 7).

In both schools, the instructional purpose of *zhua* was, according to a school I teacher, to "guide students in studies. Ask them to come for 5 minutes, to memorize something they haven't done or don't understand." In practice, the instructional purpose of *zhua* was to target low-achieving urban students in grades 6 and 7, an important period to "lay down a strong [academic] foundation for the upper grades." As grades 6–7 are the early years of *zhongkao* preparation, teachers were very conscious of the strong academic foundation required for the accelerated learning of grades 8 and 9. Consequently, they focused on urban students with "study habit problems" or low motivation.

A school I teacher described this type of correction as critical to urban students' understanding that "to stay here, they have to get good grades." This sent urban students the message that teacher expectations were high and *zhongkao* preparation vital. My own observations confirmed that urban students were much more likely than their rural migrant counterparts to be called into the teachers' office. During the academic year, I observed the individualized tutoring of urban students in both schools. Teachers exerted tremendous effort to tutor (*zhua*) students individually or in groups of two or three. The school S seventh-grade head teacher noted that this "tiring" endeavor ensured that students understood critical topics they had missed in homework, thus enhancing learning and achievement.

Teachers also gave large groups—typically, homeroom classes—additional teaching or drilling before an exam. For example, during the 20 minutes of lunchtime, I frequently witnessed students in school S's urban homeroom class studying in their classroom after they finished eating. The rural migrant students had freedom to play outside. Moreover, school S teachers occasionally allocated their 40-minute *fudaoke* (a daily scheduled 40-minute period in which teachers could teach, review material, or have students

	TABLE 7		
IN-SCHOOL	OUTSIDE-CLASSROOM	INSTRUCTIONAL	Time

Instructional Type	Time of School Day	Number of Students
Zhua: tutoring small groups of students	Between class periods, lunchtime or after school, <i>fudaoke</i> , <sup>a</sup> nonteaching periods	1–3
Additional classroom teaching	Lunchtime, after school, fudaoke	Large groups (e.g., homeroom class)

<sup>a</sup> A daily scheduled 40-minute period with flexibility for teachers to teach, review material, or have students do self-study. Teachers rotate taking responsibility for the *fudaoke*. On average, a teacher has one *fudaoke* for each homeroom per week.

do self-study) to teaching high-track homerooms, instead of following the teaching schedule and instructing low-track homerooms. Low-track homeroom students thus had no instruction while high track classes received 90 minutes. Teachers also extended *fudaoke* for the high-track homeroom. Consequently, the rural migrant classes left school around 4 p.m., while the urban class finished at 7 p.m. Resource allocation practices were similar in school I during eighth and ninth grades, when urban students would remain at the school until 7 p.m. or later for mock exams, while their rural migrant classes remained integrated during the school day.

Recognizing the pressure placed on urban students by the excessive amounts of in-school outside-classroom instructional time, a school I teacher admitted, "It's really sad. Urban students are like products." In both schools, teachers acknowledged, "All the pressure goes to teaching urban children. With rural migrant children, we can be relaxed." Reflecting the burden felt by urban students in both schools by this instructional resource's excessive provision, a school I urban child lamented, "For an urban child, teachers will be very strict in their expectations and give a lot of pressure. But for a nonurban child, they will be much more relaxed. To be very honest with you, we really study too much, to the point that we are too tired. Right now, I spend more time at school than at home. It's like a person's value is measured by their test score, but it should include other aspects as well." This reflected the views of other urban students in both schools.

#### Discussion

#### Chinese Rural Migrant Children's Education in Contemporary China

Importantly, this article contributes to our understanding of *hukou* inequality in contemporary China. My findings provide empirical evidence that *hukou* barriers were not dissolved in two public schools during the peak of Shanghai compulsory educational reforms. However, to truly understand how and why *hukou* matters, the backdrop of Shanghai's high-stakes testing context must be considered. The institution of *hukou*, dating from the state Socialist era, has become a school marker of whether to invest in a child's academic development. Findings reveal existence of an exam-induced inequality in which academic needs are prioritized based on ranking categorizations; schools systematically invested instructional resources to academically develop those with an urban *hukou* (who "count"), even at the expense of rural migrants who possess a rural *hukou* (who "don't count").

More broadly, this study contributes insights on the issue of migrant children's urban educational opportunities raised since China's 2009 PISA participation. First, it provides a new perspective on the interaction between high-stakes testing pressure and *hukou* to shape rural migrant students' access to educational opportunities in Shanghai public schools. Importantly, the schools' similar inequality patterns—school I integrating rural migrant children into homerooms despite urban parental opposition; school S violating municipal policy by sorting rural migrant children into segregated homerooms—suggests schools' limited agency in the face of high-stakes testing pressures. To date, the literature on China's rural migrant education and media PISA discourse largely overlooks high-stakes testing as a critical context in analyzing rural migrant children's educational opportunities in the city (Lu and Zhou 2013; Loveless 2014).

I also problematize the predominant conception of "educational equity" for China's rural migrant children. Policy makers and researchers generally define educational equity for China's rural migrant children as equal access to "quality" education (Ming 2013); any barriers that prevent rural migrant students from accessing the same "quality" public educational opportunities as their urban classmates should thus be removed. Such arguments motivated Shanghai reforms that opened up public schools to provide "the quality education capable of helping them [rural migrant youth] to maximize their true potential" (Zhou 2016, 17). Researchers thus recommend that municipal policy makers address the "lagging evaluation system" (Wei and Hou 2010) by opening up the *zhongkao* to rural migrant youth.

However, my findings reveal the distorted understanding of educational equity that arises when we assume that teaching practices are "good" in Shanghai's high-stakes testing context. As educators used "successful" teacher practices to maximize ranking, they excessively invest in urban students' academic growth at the expense of nonacademic development. Reflecting the reality that "when successful teaching is disconnected from good teaching, the results are seldom favorable for . . . the student" (Fenstermacher and Richardson 2005, 192), the education that urban students receive should no longer be regarded as the model for rural migrant students. I thus propose a reconceptualization of "equity" toward whole-child development and ultimately the re-centering of teaching on the child. Such a goal, aligned with existing quality (*suzhi*) reforms in China (Cravens et al. 2012), can only be achieved when developing a child's academic potential is intrinsically valued, rather than treated as a means to an end.

Contribution to the Field of International Comparative Education

"In evaluating the success of a school, the most important priority is the children." (school I principal)

Testing is an enduring feature of modern schooling worldwide, fueled by ideologies of competition and performance (Sahlberg 2010). Importantly, Shanghai provides a unique opportunity to examine an important, but often overlooked, dimension of modernity and educational progress: the globally expanding cultural institutional infrastructure to measure "modern" progress (Ramirez et al. 2018). This study's findings have significant implications for the field of international comparative education given the growing global emphasis on high-stakes testing.

The findings from Shanghai, with its long history of high-stakes testing, provide a critical context from which to develop understanding of transnational patterns of within-school inequality in high-stakes testing contexts. To date, the literature on educational inequality is predominantly based in the United States, the United Kingdom, and other contexts in which high-stakes testing is a relatively recent phenomenon. There, "competitive pressures for higher productivity, better efficiency and system-wide excellence are affecting schools and teachers. Competition over students and financial resources are shifting schools' modi operandi away from moral purposes toward an emphasis on productivity and efficiency, i.e. measurable outcomes, higher test scores, better positions in school league tables" (Sahlberg 2010, 48). Such reforms have resulted in a moral shift in teaching values from "good teaching" that responds to a child's needs as the primary concern to "successful teaching" that focuses on maximizing ranking in the "global testing culture" (Fenstermacher and Richardson 2005; Smith 2016).

Importantly, findings from the United States and the United Kingdom converge with data from Shanghai in important ways (Gillborn and Youdell 2000; Booher-Jennings 2005). First, the "successful" teaching practices that I witnessed in Shanghai schools are also documented in the United States and the United Kingdom, where, in response to high-stakes testing pressures, teachers admitted teaching "in ways that they feel are harmful to students" (Santoro 2013, 565).

Second, findings from Shanghai, the United States, and the United Kingdom reveal an alternative, ranking-oriented tracking that differentiates students' academic experiences within the same school. In this tracking system, teachers prioritize students whose academic development will increase school ranking. In the United States and the United Kingdom, "educational triage" practices constitute a tracking system that diverts resources to "bubble kids" (students at the cusp of passing) at the expense of "hopeless cases" (students perceived to have no hope of passing, even with resource investment) (Gillborn and Youdell 2000; Booher-Jennings 2005). The consequent resource inequality patterns emerged from a shift in the purpose of schools to "maximizing their performance [ranking]" (Gillborn and Youdell 2000, 199). In response to coercive pressures from high-stakes testing, teachers have admitted to contributing to students' underachievement and a widening achievement gap (Booher-Jennings 2005).

Third, when tracking is based on a perceived ranking benefit to the school, the differentiation of students' experiences may not be adequately measured through traditional within-classroom dimensions of classroom sorting and tracks. In Shanghai, in-school outside-classroom instructional time constituted a significant resource that educators differentially allocated to students. Similarly, in US schools, where ranking pressures penetrate deeply, the differentiation of student experiences based on perceived ranking benefit also lies beyond the classroom. For example, US schools reduce suspensions for high achievers and increase them for low achievers during exam periods (Figlio 2006).

Table 8 summarizes two typologies of within-school inequality, each providing a distinct conceptualization of and rationale for the divergent academic experiences of students attending the same school. Importantly, the typologies situate the moral dimension of teaching at the forefront of a discussion of schools as "sorting machines." Type A inequality is the predominant model for conceptualizing and measuring inequality, with assumptions of "good" teaching. Type B inequality reflects the transnational, within-school inequality patterns that emerge from the Shanghai, US, and UK contexts,

	Within-School Inequality			
	Туре А	Туре В		
Analytic Lens	Non-High-Stakes Testing System	High-Stakes Testing System		
Resource allocation:				
Criterion	Academic heterogeneity	Ranking		
"Tracking" differentiation	Academic ability	Ranking- oriented "value" (e.g., "count," "don't count")		
Research focus to investi- gate differentiated learning environments	Social instructional group (e.g., classroom, track)	Social instructional group (e.g., classroom, track) and nontraditional dimensions outside classroom (e.g., extended instructional time)		
Teaching:				
Moral dimension of teaching	"Good" teaching aims to benefit student	"Successful" teaching to maximize ranking can be an act of injustice to students, as teaching decisions can be detrimental to students' social and/or academic development		
Purpose of schooling	Moral purpose (e.g., realizing student's academic potential)	Efficiency and productivity (e.g., maximiz- ing ranking)		

 TABLE 8

 Typology of Within-School Inequality

when, in response to high-stakes testing pressures, teachers use "successful" teaching practices that are detrimental to students.<sup>12</sup> Importantly, this typology challenges researchers to think more deeply about educational inequality in high-stakes testing contexts, particularly the implicit assumptions that we apply when conceptualizing, researching, and redressing educational injustice.

# Conclusion

This study highlights commensuration as a key cultural process by which large-scale assessments and high-stakes testing regimes transform schools into unjust institutions. I thus draws attention to the emergence of rankingoriented categories (e.g., "count," "don't count," "hopeless," "bubble") across high stakes testing contexts (Gillborn and Youdell 2000; Booher-Jennings 2005). While the educational literature has already documented these categories, this study goes further by analyzing these social categories as manifestations of commensuration, a cultural process that "is often so taken for granted that we forget the work it requires" (Espeland and Stevens 1998, 315). Importantly, meso-level commensuration processes "transform cognition" (Espeland and Sauder 2007, 16) through rendering a child's value relative to ranking maximization, linking teachers' microlevel practices with state macrostructures that enable and constrain their behavior. In both Shanghai schools, the Chinese state—through hukou policies and testing regimes—"wields immense power in shaping and legitimizing systems of categorization, which ... are fundamental preconditions for cultural processes" (Lamont et al. 2014, 13).

Commensuration's lens enhances our understanding of microlevel, educational inequality processes in high stakes testing contexts by acknowledging "successful" teaching as injustice. To date, educational inequality research in testing contexts predominately focuses on resource distribution (Gillborn and Youdell 2000; Booher-Jennings 2005). However, commensuration illuminates inequality's *multidimensional* nature by expanding justice beyond equal resource access, to respecting a child's value from a teaching lens. By broadening our educational equity conception, this article emphasizes an inequality dimension in sociological, but largely neglected in educational research: recognition, defined as "being acknowledged and given validation, legitimacy, value, worth, dignity" (Lamont et al. 2014, 12). In investigating *education-specific ways* that commensuration processes shape microlevel school practices, I equate the injustice of "misrecognition" with the diminished integrity of teaching. In both Shanghai schools, recognition mattered in the school academic community. Rural migrant children were

<sup>&</sup>lt;sup>12</sup> Type B inequality applies to a school where high-stakes testing pressures penetrate so deeply into school institutional culture that teachers are coerced into "teaching in ways that they feel are harmful to students" (Santoro 2013, 565).

disturbed by educators systematically neglecting their academic needs (Yiu 2016), while urban youth resented teaching that prioritized academic development at the expense of their well-being. Equity from the perspective of teaching practices thus legitimates a child's value in the learning community through "good" teaching practices that promote whole-child development and deprioritize ranking maximization.<sup>13</sup>

Importantly, acknowledging teaching as educational injustice contributes new insights to critiques of large-scale assessments and high-stakes testing:

First, I problematize an assumption in the majority of testing literature on inequality: "advantaged" students do not experience injustice in high stakes testing contexts. To date, inequality research focuses on how schools (re) produce inequality for those "disadvantaged" relative to their "advantaged" peers (Gillborn and Youdell 2000; Booher-Jennings 2005). What this literature overlooks, which my study illuminates, is the educational mistreatment of teachers excessively investing in urban youth's academic growth. Such mistreatment was apparent to Shanghai urban youth, who expressed anxiety from test pressures and considered test scores to represent their value. Future studies should investigate the educational experiences of "privileged" students.

Second, the diminished integrity of teaching in both Shanghai schools suggests a transnational professional dilemma that teachers increasingly face in high-stakes testing contexts: whether teaching students is a means to maximize ranking. Reflecting teachers' sentiments in both schools, a school I teacher admitted, "Teachers don't like focusing on test scores. Education isn't just about grades, but also children's development." Such internal conflict reflects the "turmoil" (Hallett 2010) that is distinctive of professional teaching cultures in other high-stakes testing contexts. The phenomenon of teachers worldwide facing increasing pressure to teach in ways that violate core professional values suggests the "bottom up," transnational convergence of distorted professional teaching cultures. Maximizing ranking as a purpose of schooling thus emerges as a distorted, *transnational* core teaching value in this emergent professional teaching culture, which reinforces Anderson-Levitt's work (2002) on how institutional arrangements (e.g., high-stakes testing) provide opportunity for new teaching values to develop within transnational professional teaching cultures. Unfortunately, the Shanghai case contributes to existing research on how testing undermines the teaching profession's integrity worldwide (Santoro 2011).

Finally, I raise the need to reconsider our global conceptions of "quality teaching" in high-stakes testing contexts. As I witnessed Shanghai teachers set "high academic expectations" at the expense of urban youth's well-being, I

<sup>&</sup>lt;sup>13</sup> This definition derives inspiration from the teaching literature, which defines equity as teaching that values minority students' cultural identities, values and practices (Windschitl et al. 2016).

recognized teaching itself to be an injustice to "advantaged" students. Recognizing the moral dimension of teaching makes explicit the assumption of "good" teaching, which underlies our conceptions of "quality" teaching and may no longer apply in high-stakes testing contexts (OECD 2018).

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