The education of China's migrant children: The missing link in China's education system

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ABSTRACT

This paper examines the academic performance of migrant students in China and explores determinants of their performance. The paper compares academic performance, student backgrounds and measures of school quality between private schools attended only by migrant children in Beijing (Beijing migrant schools) and rural public schools in Shaanxi province. Furthermore, we employ multivariate regression to examine how individual characteristics and school quality affect migrant student performance and the achievement gap between migrant students and those in rural public schools. We find that although migrant students outperform students in Shaanxi's rural public schools when they initially arrive in Beijing, they gradually lose ground to rural students due to the poorer school resources and teacher quality in their schools. Additional analysis comparing migrant students in migrant schools to migrant students in Beijing public schools demonstrates that given access to better educational resources, migrant students may be able to significantly improve their performance.

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1. Introduction

The "iron law" of economic development states that as a nation industrializes, the proportion of its population engaged in farm labor decreases and the proportion engaged in off-farm labor increases (Kuznets, 1955). This shift reflects the phenomenon whereby people who once farmed the land move to cities in search of opportunity and provide labor to the expanding industrial sector.

In China the movement of people from rural to urban areas has increased dramatically over the past 30 years due to the country's rapid economic development. From 1978 to 2004 China's gross domestic product grew more than 10-fold (CNBS, 1990–2008). Over the same period millions of migrants moved from rural areas to cities in search of work. Thus, while in 1990 migrant laborers accounted for only 8% of China's total number of rural laborers, by 2008 225 million migrants—approximately 20% of the total rural labor force in China—were living and working in China's urban areas.

While labor has flowed relatively freely from agriculture to industry, the process of shifting lives, homes and families has been more difficult. A core aspect of the challenges migrants face is found in China's *hukou* household registration system (Naughton, 2007), which classifies China's citizens as either rural or urban residents. Without an urban *hukou* migrants and their families have limited access to urban public services, including housing, healthcare, social security, and above all, education. As a result, life in the cities can be immensely challenging for millions of migrant families.

Despite the challenges, an increasing number of migrants have begun bringing their children to the cities (Sa, 2004). These children are China's so-called *migrant children*. Those who remain in rural areas while their parents migrate to the cities for work are called *left-behind children*. The number of migrant children has been increasing at a high rate (ACWF, 2008). In 2008 an estimated 20 million migrant children were living with their parents in China's cities.

As the number of migrant children has risen, the education of migrant children has become one of the greatest challenges faced by both migrant families and the Chinese education system, a challenge that has not always been successfully met. In China today public schools in both rural and urban areas are supposed to provide free education to children. However, this free education is only guaranteed for children whose hukou matches the school's

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location (Sa, 2004). Given that migrant children in cities still retain their rural hukous, they are allowed to enroll in urban public schools only if there is available space. In many cases migrant parents can only enroll their children in urban public schools if they are willing and able to pay steep out-of-district tuition fees. Consequently, in major metropolitan areas, such as Beijing, tens of thousands of children are still unable to attend public schools, falling into a conspicuous gap in the provision of public education (Han, 2004; Kwong, 2004).

Because the public education system fails to cover migrant children, privately run, tuition-funded, for-profit *migrant schools* began to spring up in the 1990s, quickly becoming the major venue for the education of migrant children (Ma et al., 2008). With tuition fees set at levels more reasonable than those charged by public schools for out-of-district students, migrant schools admit migrant children regardless of their hukou status. Many parents, unable to enroll their children in urban public schools, thus turn to migrant schools. While data do not exist showing exactly what fraction of migrant children is enrolled in migrant schools, estimates are high. For example, in Beijing it is estimated that 70% of migrant children attend migrant schools. Case studies on the schooling of migrant children in major cities, such as Beijing and Shanghai, suggest that hundreds of thousands of migrant children attend migrant schools in China's cities (e.g., Stepping stones, 2010).

Long-standing public concern about migrant children and the sheer volume of students enrolled in migrant schools throughout China give rise to a fundamental question: How do migrant children perform academically, particularly compared to children in China's formal (both rural and urban) public school system? Despite the fundamental importance of this issue, to our knowledge there have been almost no studies that empirically examine the academic performance of migrant children and compare it with that of children in China's public schools. The only exception is an unpublished paper by Song et al. (2010) which finds that attending Beijing public schools is beneficial to the academic performance of migrant students. Most other studies on the education of China's migrant children are anecdotal or descriptive (CCAP, 2009; Ding, 2004; Han, 2004; Human Rights Watch, 2006; Kwong, 2004; Liu, 2002; Ma et al., 2008). In these studies, privately run migrant schools, the main venue of education for migrant children, are often described as unregulated, with poor facilities, under-qualified teachers and fragmented curricula. Such schools are often transient, with sudden closings due to anything from having their leases pulled because of rebuilding projects to local regulation violations. The poor quality of migrant schools and their staff raises serious questions about the quality of education that they can deliver. There is a clear need for a careful examination of the academic performance of migrant students, the majority of whom attend migrant schools.

The overall goal of this paper is to present evidence on the academic performance of migrant students and explore the determinants of migrant student performance. One of the most important reasons for the lack of empirical evidence on migrant student performance is the lack of quantitative data on migrant schools. In our study we collected data on 23 Beijing migrant schools and the students in these schools. We also use data from a sample of 70 rural public schools in nine poor counties in rural areas of Shaanxi province as well as from a sample of 11 classes in four public schools in Beijing. Comparisons between migrant schools and rural/urban public schools in our sample help us gauge the academic performance of migrant students.

To meet the goal of this paper, we undertake two sets of comparative analyses. First, we compare student academic performance between Beijing migrant schools and poor rural public schools in Shaanxi. We also compare student backgrounds and school quality (measured by school resources and teacher qualifications) between these two types of schools in order to explore possible determinants of student performance and of the observed achievement gap between migrant students and poor rural students. Second, we employ multivariate regression to rigorously examine how individual backgrounds, school resources and teacher qualifications affect migrant student performance and the achievement gap. In addition, we also conduct the same sets of comparative analyses to compare student academic performance between migrant students in Beijing migrant schools and Beijing public schools.

While ambitious in scope, there are limitations to our study. Although we identify gaps in the performance of migrant students and students in rural public schools, our observational data do not allow us to definitively prove that the differences are causal in nature. Moreover, although we seek to control for self-selection, there still may be a number of unobservable factors that cannot be fully accounted for. In the subsequent analysis, we will explore the nature of these selection issues and seek to control for as many of the observed characteristics as possible. We hope that we have left only limited space for unobserved factors to confound our inferences.

The remainder of this paper is arranged as follows: The first section describes the data sets we collected for the analysis and explains the empirical strategy that we use to approach the main research questions. The next two substantive sections report on the results of the empirical analysis and other supporting evidence. The last section summarizes the findings and concludes.

2. Research methodology

2.1. Data

In our analysis we draw on three data sets. The first data set comes from Beijing migrant schools. The second data set comes from rural schools from poor areas of Shaanxi Province in northwestern China, China's remote rural region. The third data set comes from Beijing public schools that are located close to the migrant schools in our sample. The three data sets are designed so that the data—especially through the use of a single, standardized test—can be used to compare the educational performance of students in Beijing migrant schools to that of students in rural schools in poor rural areas and local public schools in Beijing.

2.1.1. Beijing migrant school data

Using a list of all 230 migrant schools in Beijing collected by our research team,[1] we chose our sample of migrant schools. We first divided the list by district and excluded all districts with fewer than five schools. This focused our study on districts where migrant schools are more concentrated. There are a total of seven districts in our sample. We randomly chose ten percent of the schools in each of these districts to represent the migrant schools in each district. Our total sample includes 23 schools. Because of the availability of international standard testing resources that allow us to create exams that are comparable across China, we

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[1] The first step in collecting a representative data set on migrant schools in Beijing was to collect a comprehensive list of schools. Unlike public schools, no official list of Beijing migrant schools is available. To collect a comprehensive list of migrant schools in Beijing we contacted all educational and research institutes and non-profit organizations in the greater Beijing area that might have contact information for Beijing migrant schools. We then called each school to confirm that the school was still open. During each phone call we also asked the principal of each school if there were any other schools in their area. By proceeding in this way we believe that we were able to establish as complete a list of Beijing migrant schools as possible—certainly more complete than any other existing list. A total of 230 schools were on our list.