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6 The rise of private supplementary tutoring

Contemporary issues and international perspectives on shadow education in China

Roy Y. Chan, Hei-Hang Hayes Tang and Patrick Delaney

Introduction

Shadow education, also known as private supplementary tutoring (PST), has spread widely all over the world (Manzon and Areepattamanni, 2014). Notably, China (Mainland and Hong Kong) has experienced massive shadow education growth in the past two decades (Zhang and Bray, 2016), where PST is often viewed as an effective way for young adults to achieve higher test scores such as the Hong Kong Diploma of Secondary Education Examination (HKDSE) and the National College Entrance Examination (NCCE), commonly known as the Gaokao (Bray et al., 2015). While numerous scholars have called for new empirical research on shadow education (Trent, 2016), research on PST has often lagged behind the expansion and diversification of the phenomenon (Liu and Bray, 2016). Furthermore, little is known about whether such activity helps students succeed in the HKDSE and NCCE, and to what extent these activities prepare them for higher education participation after high school (Bray and Lykins, 2012).

Generally, the HKDSE and the Gaokao provide the primary gateway for students to obtain a post-secondary education (Zhang, 2016). Today, a significant number of Chinese high school students prepare for the HKDSE and the Gaokao by participating in PST activities. Typically, PST refers to the outside tutoring services offered by the private sector and paid for by families. Often seen as the third most important education sector, critics have argued that the increasing demand for PST is the result of several economic and social factors including the perceived low quality of mainstream education, depleted teacher salaries, introduction of high-stakes examinations, socioeconomic status, gender and inadequate content learned at schools (Zhang and Bray, 2016). Additionally, PST has continued to expand rapidly as a result of fierce competition in the global labour market. While some have noted that shadow education provides a steady income to private tutors, others have complained that much PST is highly driven by students' desire to pass high-stakes examinations set by the school or system level (Au et al., 2010). Furthermore, PST is often driven by the 'educational desire' (Tang, 2015) of parents to develop their child's general learning capacities and enhance self-esteem.

This activity is highly evident across East Asia, where Confucian values often emphasise diligence and effort that are further fuelled by globalisation and privatisation of education as families become increasingly aware of the fierce competition in the labour market (Sallii, 2005). Normally, the driving force behind globalisation is predominantly free market capitalism. Maringe

(2010:24) states 'globalization is a multidimensional concept in which the social, cultural, technological, political and ideological aspects of life become increasingly homogeneous'. In other words, the growth and spread of shadow education 'is deeply embedded in the culture' (Bray, 2009:24) as a response to the globalisation of academic capitalism. School systems in China are increasingly competitive, which prompts an intensifying demand for and supply of private tutoring. Thus, shadow education is viewed as a 'hidden' form of education privatisation as a result of high-stakes testing and school system change within the curriculum. As Bray (2009:5) noted, 'as the curriculum changes, so does the curriculum change in the shadow'. And as more friends participate in private tutoring, the more likely students are to partake in shadow education activities (Baker and LeTendre, 2005).

Therefore, this chapter seeks to explore the determinants of private tutoring participation not only for education policy-makers and university planners but also for parents and students. Because many Chinese students are driven by the significant demands of college admission, this chapter adds to an ongoing policy discussion on the expansion and prevalence of shadow education and its implications for high-stakes testing and NCCE preparation. As long as the HKDSE and the Gaokao serve as the principal gatekeeper to Chinese higher education institutions, parents and students will continue to be motivated to pay for shadow education activities in the years ahead. Thus, it is our hope that our chapter will raise serious concerns about college entrance examination and admission effects on PST.

The landscape of PST and college test preparation

In recent years, shadow education has accomplished significant private capital investment from families across the income range. Most notably, recent research by Global Industry Analysts, Inc. (2012) shows that for all levels of primary and secondary schooling, the entire world will spend over US\$102.8 billion each year on shadow education by 2018 (Forbes, 2012). Additionally, some research indicates that parents invest in shadow education because they fear losing out in the globally competitive workforce if they do not invest in PST to improve their child's competitiveness in high-stakes entrance examinations (Xue and Ding, 2009). In other words, shadow education arises from competitive educational environments, particularly in East Asian countries with high-stakes examination cultures and stratified education systems (Tang, 2015). Because Confucianist culture in East Asia often prides itself on examination scores to determine an individual's academic achievement (particularly success from secondary to higher education), there are several good reasons why private tutoring benefits these national contexts and can be instrumentally beneficial to individuals.

Historically, public education in East Asia has long been regarded as a public good benefiting not only individuals but also the whole of society. Today, however, the growth in market forces has turned education into a private good and, often times, a commodity for purchase and trade (Tilak, 2008). This market shift is particularly evident in the case of shadow education, whereby major tutoring companies in China and other Asian societies offer classes in lecture theatres with overflow rooms served by video links typically before or after the regular school day, at weekends, on public holidays and during school vacations. Furthermore, private tutoring companies may offer lessons that are more individualised than mainstream education, and occasionally, assist low-performing students to work at their own pace without the feeling of falling behind. In addition, PST may extend students' capital acquisition and accumulation and

contribute to their lifelong learning (DiMaggio, 1982). Moreover, shadow education may provide steady incomes for local tutors and teachers who decide to offer PST to gain extra income outside their regular classes. Nonetheless, while some factors of private tutoring are deemed positive, other elements can be seen as problematic.

For instance, PST growth has often been criticised for reproducing social and economic inequalities in mainstream schooling and wider society (Bray and Lykins, 2012). While in some exceptional cases, there are educational groups and agencies that provide free tutoring to disadvantaged students, most tutoring services are focussed on profit-making or return on investment whereby tutors serve higher-achieving wealthy students (Bray et al., 2014). In addition, some scholars have noted that the rise of shadow education negatively affects the dynamics of teaching and learning (e.g. curriculum, student performance) in formal schools, students' engagement in the classroom, as well as student performance in both classroom activities and examinations (Bray, 2009). That is, PST may damage students' independent-learning abilities, restrict students' leisure time and affect formal educational systems in terms of both equity and quality (UNESCO, 2015). Thus, new research is much needed to understand the motivations and consequences of shadow education in other developed countries, such as Japan (Yamamoto and Brinton, 2010), Hong Kong (Zhan et al., 2013), Vietnam (Dang, 2007), Macau (Ho et al., 2008) and South Korea (Kim and Lee, 2010). As mainstream schooling often does not teach students testing skills needed for high-stakes examinations, more students will continue to enrol in shadow education to avoid fear or regret of not participating or succeeding in the future.

History of shadow education

Historically, PST has often stirred much controversy over educational quality and equality (Mori and Baker, 2010). Typically, much comparative research in both developing and transitional countries has focussed on issues such as access to higher education, funding, student mobility and the impact of globalisation (Manzon, 2011). Rarely, however, has comparative research examined the global challenges of shadow education in understanding inequalities in college access and participation between urban and rural regions.

To enumerate, shadow education, first coined during the early 1990s in Malaysia (Marimuthu et al., 1991), Singapore (George, 1992) and Japan (Stevenson and Baker, 1992), was used as a metaphor to describe any tutoring activities conducted outside formal schooling. UNESCO's International Institute for Educational Planning (IIEP) first published a cross-national study of private tutoring in 1999. Most notably, the report finds that PST has a long tradition in elite privileged families and that its history is as long as that of formal schooling. For example, South Korea is known for its *hagwons*, Japan for its *juku* and Taiwan for its *buxiban* (Kang, 2010). All of these activities are often referred to as 'cram schools', whereby for-profit institutions 'offer(s) supplementary instructions and practice exams in the classroom and provide their own curriculum, publications and textbooks like a mainstream school' (Bray, 2009:25).

Today, cram schools are often learning centres or institutes that prepare students for better examination performance. These institutes often flourish when high-stakes testing serves as a gatekeeper to future educational opportunities (Buchmann, 2002). Bray (2003:17) divides cram schools into four categories: (1) private tutoring only exists because mainstream education exists; (2) size and shape of private tutoring changes, as size and shape of the mainstream system

changes; (3) the public has focussed more on the mainstream than on its shadow and (4) the features of the shadow system are much less distinct than those of the mainstream system. That is, the primary purpose of cram schools is to improve grades and performance in high-stakes examinations. Other purposes may include improving student confidence, increasing classroom motivation and fostering intellectual capital. Despite the increasing attention from policy-makers and planners to address the expansion of PST in East Asia, much private tutoring often goes unnoticed in today's commercialised world (Trent, 2016).

For instance, the highly renowned PST company *Kumon* now claims to serve over 4 million students in 45 countries, including China, India, Indonesia, South Korea, Malaysia, Myanmar, Singapore, Thailand and Vietnam (Kumon, 2016). Similarly, *Modern Education*, a highly renowned cram school in Hong Kong, announced plans to expand their tutoring services into Mainland China (Kwo and Bray, 2014). As such, one can argue that shadow education is highly marketised service in East Asia and has a backwash effect on regular schools (Mori and Baker, 2010). Wealthy families can afford greater amounts of PST than students in low-income families and thus have higher chances of mobility and career success (Bray et al., 2015).

Shadow education in China

PST has emerged significantly across China (Xue and Ding, 2009; Zhang, 2014). China has, in fact, experienced massive shadow education growth in the past two decades, which will account for more than half the world's enrolment by the year 2050 (Altbach, 2013). More recently, however, private tutoring centres have sprung up focussing on foreign standardised tests such as the SAT, GRE and TOEFL. The demand for college test preparation in China is often the result of perceived student weaknesses or limitations of the schooling system. Chinese parents believe that investing in shadow education is the most important prerequisite leading to an individual's success in the labour market (Baker and LeTendre, 2005).

As noted earlier, Confucian values in East Asia often place education as the highest priority, and parents expect their child to have as much education as possible, regardless of gender, socioeconomic status and geographical location (Zhang, 2014). While many Chinese families care immensely about the success of their child's progress, little research has yet to examine whether shadow education enhances students' educational achievement from secondary to post-secondary levels or their transition from post-secondary to employment. Furthermore, limited studies have yet to explore how PST influences students' NCCE performance.

Historically, studies have noted that the reasons Chinese students engage in PST relate to the large disparities in education quality, test-oriented education, the high cultural value of education, as well as schoolteachers' need to increase income. In addition, Xue and Ding (2009) noted that the one-child family policy has further fuelled demand. Specifically, they found that 73.8% of Chinese students received tutoring in elementary schools, 65.6% in middle schools and 54% in high schools. In a similar study, Bray et al. (2014) concluded that 92.1% of senior high school students in Hong Kong enrolled in tutoring 'to improve examination scores', followed by other pressures to perform well in examinations. Bray et al. (2014) emphasised that examinations, and the consequences of success or failure, are the dominant driver of demand for private tutoring in China.

China's high-stakes examination system has often been criticised for exacerbating inequalities between urban and rural regions, as well as limiting students' imagination, creativity and critical

thinking skills (Zhang, 2016). This cause is often the result of the growing unequal access to high-quality tutors between large urban/high-income eastern regions and small rural/midwestern regions. For instance, Kwok (2010) claimed that high-income households had greater demands for PST than middle- and low-income households: 62.5%, 57.9% and 47.1%, respectively. Similarly, Zhang (2014) found that, in Chongqing, only 22.1% of rural students received some kind of private tutoring compared with 65% of urban students, in part because of the availability of tutors. Comparatively, Lei (2005) suggested that over half of urban students in China are more likely to engage in PST than their rural counterparts.

Academic achievement and shadow education in China

Relatively, few studies on academic achievement in China have been conducted in the past decade (Ho et al., 2008), and fewer still have been reported in English by Western-influenced researchers (Byun, 2014). Historically, studies on the effectiveness of private tutoring on academic achievement have often been contradictory. For example, some studies have reported a positive impact of private tutoring in Japan (Stevenson and Baker, 1992), Taiwan (Liu, 2012) and Kenya (Buchmann, 2002), while others have found a negative impact on achievement in Korea (Lee and Shouse, 2011), Singapore (Cheo and Quah, 2005) and Nepal (Thapa, 2011). A more recent study by Byun (2014) found that PST for test purposes made some difference in achievement gains in South Korea, but that other types of tutoring had made little difference. Similarly, Sohn et al. (2010) found a positive relationship between expenditures on PST and academic performance in Seoul, but that the relationship deteriorated when adjusting for student background. However, in a similar study, Xue and Ding (2009) found a negative correlation in data from 4,772 students. In addition, Kang (2010) suggested that there were modest effects from investment in private tutoring among 1,752 students tracked by the Korean Education and Employment Panel. Consequently, research on private tutoring has often painted mixed results. Despite its contested benefits, some parents and students still believe that investment in shadow education is worthwhile to reassure themselves they are doing everything they can to assist their child in succeeding in examinations.

It is interesting to note that Bray (2003) argued that international governments have adopted four different stances on shadow education: (type I) to ban, (type II) to ignore, (type III) to regulate and (type IV) to encourage. He argued that China falls under type III in that the government regulates tutoring centres and requires tutors to be as qualified as mainstream teachers (People's Republic of China, 2004) but prohibits the latter from using their position as teachers for profit or personal gain (People's Republic of China, Ministry of Education 2013:Item 5). However, these laws are in practice difficult to enforce, despite such measures as those enacted, for example, by the Shanghai provincial government to curtail this phenomenon by offering teachers a merit-pay salary and thus reducing the economic incentive to tutor students outside of formal schooling (Shanghai Education Commission, 2009).

This all presents a problem in Chinese society, as the mainstream curriculum does not include preparation for the SAT or other similar exams. Students wishing to study abroad have overwhelmingly begun attending private tutoring centres for their SAT preparation classes. Byun and Park (2012) examined the effectiveness on student achievement defined through SAT scores in relation to the weekly amount in hours and the overall duration of the study. Specifically,

160 East Asian American students were given a questionnaire asking about their SAT tutoring history, family income and SAT scores. The results suggest that tutoring has a trivial effect on SAT scores, with the law of diminishing returns kicking in at 20 hours per week and at 24 months of classes. The authors did not control for endogenous variables such as student motivation or attitude towards learning, unlike Zhang (2013) in his analysis of 40,000 students taking the NCCE in Jinan, Shandong, China. This sampling method thus allows this to be considered a city-wide representative sample of 11th and 12th grade students attending regular public high schools in Jinan. The data indicate that urban students are considerably more likely to participate in private tutoring than their rural counterparts and are more satisfied with their tutors as well. Zhang found that tutoring has mixed effects on student achievement dependent on students' location, urban or rural, and on the subjects tutored. With an average overall effect as not significant on achievement, private tutoring was found to have a significant negative correlation with rural students in Maths, Chinese and overall NCCE score, but underperforming urban students or urban students from lower quality schools may receive a significantly positive effect from private tutoring. It is not surprising that UNESCO's *2013/2014 EFA Global Monitoring Report* (2014:271) stated that 'private tutoring, if unchecked or uncontrolled, can be detrimental to learning outcomes, especially for the poorest students who are unable to afford it'. Aside from Zhang (2013), Zhang and Bray (2015) focussed on the demand side of tutoring and its prevalence among 860 grade nine students and 773 parents in Chongqing, China. Their results indicate that 70% of the sampled students representing both urban and rural areas of Chongqing reported having received tutoring during their schooling. More than half reported receiving more than four hours during regular school seasons, and a quarter reported receiving more than 15 hours per week.

Attempting to analyse shadow education's effect on student achievement, researchers throughout the world have used a variety of methods with mixed results. An individual study on one form of shadow education in one location of one student population is hardly representative of a similar student population in a different location or that of a different student population. It appears the results of one study have few if any, implications outside of the study from the available literature outlining such research. Research within China on the effects of shadow education is very limited due to available data sets and many participants' unwillingness to speak about their involvements on both the demand and supply sides, partly due to the common phenomenon of teachers tutoring their own students.

Inequality and shadow education

Shadow education can have a detrimental effect on both the economic efficiency and educational inequality in modern society (Byun, 2014). Notably, Hallak and Poisson (2007:258) asserted that 'shadow education has become a source of distortion that adversely affects mainstream education'. Similarly, Grodsky (2010:476) states that 'shadow education contributes to education inequality such as school segregation and tracking or ability grouping within schools that fall under the control of educational organizations'. In other words, students with more highly educated parents are often more informed regarding college test preparation compared to those from disadvantaged backgrounds. Consequently, shadow education creates inefficiencies and excludes certain social groups. Students taking the NCCE have found themselves investing in more PST as a result of highly competitive entrance examinations (Tsegay and Ashraf, 2016).

Thus, the NCCE system plays an instrumental role in social mobility, social equity and stability of the nation, while at the same time reproducing and maintaining inequality in college access and enrolment (Tsang, 1994).

Similarly, in the USA, Buchmann et al. (2010) found that family background and income inequalities have shaped students' likelihood of engaging in test preparation and that both variables have significant implications for college enrolment. The authors noted the recent emphasis on standardised testing in the USA has increased the demand for shadow education and potentially widened the socioeconomic achievement gap. Hence, Baker and LeTendre (2005) argued that private tutoring centres in countries like the USA are more likely to exacerbate inequalities in college access and to affect a nation's ability to provide high-quality education to the general public.

For instance, if low-achieving poor students underperform academically after participating in shadow education, then they will be at a far greater disadvantage in preparing for college examinations compared to high-achieving wealthy students. Similarly, if low-achieving poor students do realise a difference in academic achievement as a result of shadow education, then such activity carries important implications concerning educational opportunity and social stratification (Bray and Kwo, 2014).

Prestige-oriented views and status groups

As noted, Chinese high school students participate in shadow education to improve their chances in college entrance examinations with a view to entering higher education and attending elite institutions. Numerous studies have indicated that shadow education participation serves as a status-oriented or symbolic exercise of higher status through attending prestigious institutions (Lee and Shouse, 2011). Bray (2003) hypothesises that shadow education is more prevalent in countries where high-stakes testing exists and where there is a strong link between educational credentials and occupational prestige. Notably, he emphasises that students' prestige-oriented views of college entrance are likely to be influenced by the tightly structured, credential-driven framework of East Asian society. Lee and Shouse (2011) coined the term 'prestige orientation' to describe the degree to which students feel it is important to attend a top-ranked university. They suggest that prestige orientation affects parental spending on PST and that shadow education participation serves not just a functional purpose but also a symbolic purpose. In other words, adolescents who graduate from prestigious high schools are more likely to find higher occupational opportunities and social status than those from lower prestige schools.

Aside from parental spending, Karen (2002) suggested that familial background affects students' attendance at prestigious institutions. Similarly, Davies and Guppy (1997) concluded that high school graduates from low-resourced families are less likely to attend highly selective colleges and universities than those from wealthier families. Students from affluent families are more likely to hold prestige-oriented views (e.g. desire to attend elite higher education) than those from lower-income families.

'Family capital' – cultural, social, human, economic

In addition to elite status groups, shadow education can also facilitate students in gaining family capital (e.g. cultural, social, human, economic), which can benefit not only individual students but

also the whole of society. For instance, PST may increase teacher income in cases where teachers are very low paid. Students from middle-income and affluent families are more likely to acquire private tutoring than students from poor families as a result of 'family capital' (Downey, 1995).

To enumerate, families with greater incomes can easily invest in greater amounts and better quality tutoring than families with lower incomes. Buchmann's (2002) study on Kenya's highly competitive educational system suggested that the use of shadow education constitutes a form of cultural capital. The author concluded that Kenyan children from wealthy families were far more likely than other children to partake in private tutoring outside of school. In other words, a major determinant of shadow education is fierce competition for enrolment in higher education. Higher education inequalities have often centred on the cultural and social capital of families that is passed along to their children.

Generally, cultural capital is conceptualised either as high-status cultural knowledge and preferences (Bourdieu, 1997), while social capital reflects positive and rewarding relationships between children, their parents and schools/teachers (Coleman, 1988). A number of studies have claimed that students' educational outcomes are strongly correlated with family resources. While cultural resources (e.g. knowledge, skills) and cultural materials (e.g. income) have little intrinsic value because higher education outcomes differ tremendously for students of different social backgrounds, Coleman (1988) emphasised that the availability of resources and parents' ability to help their child grow makes a drastic difference to the younger generation's educational success. Coleman (1998:S101) once stated, 'The function identified by the concept of social capital is the value of these aspects of social structure to actors as resources that they can use to achieve their interests'. In other words, higher levels of cultural resources play a significant role in promoting the social well-being of adolescents and, most importantly, fostering higher academic achievement and success on entrance examinations. Families with high cultural values on higher education attainment will likely invest more in PST compared to those with lower cultural values. Thus, social inequalities persist in shadow education, particularly with regard to socioeconomic, gender and rural/urban variables.

Discussion

As we've seen throughout this chapter, shadow education has significant policy implications for educational opportunity and the process of social stratification. Specifically, this comprehensive review of the literature highlights the expansion of shadow education in China, and how PST has both positive and negative implications for Chinese society and the economy. With an increasing focus on highly competitive entrance examinations, this chapter argues that PST plays a positive role in raising students' learning outcomes outside of the mainstream education system. However, this review also suggests that the inability to access high-quality private tutors can place lower-class students at a far greater disadvantage on NCCE scores compared to affluent urban students in China. Furthermore, high-income families can often afford greater quantities of PST. Consequently, this chapter argues that PST increases students' human capital potential, prestige-oriented status group and educational mobility while at the same time exacerbating social, educational and geographical inequalities in Chinese society.

Regrettably, few policy-makers and practitioners have conducted in-depth explorations of the effects of private tutoring on academic achievement and its implications for Chinese society

either because of inadequate data or a lack of understanding of the consequences of shadow education. Instead of prohibiting or restricting PST, this review suggests that shadow education in East Asia is increasing as a result of highly competitive examination systems. This chapter thus suggests the importance of seeking alternative approaches to curbing shadow education in order to tease out the impact of college examination success on the demand for shadow education in China. Obviously, no single solution or modification can be recommended for China; however, East Asian countries and regions must attempt to tighten and regulate both mainstream education and the private tutoring industries to reduce the mentioned inequalities and inequities.

Conclusion

Educational leaders and policy-makers should be mindful of how shadow education in China can exacerbate or ameliorate social inequalities with regard to the college admissions process. While shadow education may not be restrained in the short-term, policy-makers and educators should build longer-term reform strategies and mechanisms that prevent families from distorting the genuine meaning of education. Specifically, institutional leaders and government officials should use appropriate instruments to promote equitable and inclusive learning, and reduce family/student reliance on PST. These factors may include as follows: (a) the possibility of financing tutoring programmes in rural cities as a flexible means of educating disadvantaged adolescents, (b) funding after-school programmes, as well as (c) starting television and other media networks in rural schools aiming to prepare students better for college examinations and high-stakes tests. Obviously, this process would require leaders to develop clearer policies and more effective regulations to encourage the positive dimensions of shadow education in order to increase the productivity of disadvantaged youths and to promote equity goals that align with UNESCO's Education for All (EFA). Implementing such initiatives into the policy realms may contribute further to the sociological aim of understanding the processes of social stratification, and the interplay of stratification and institutional processes involved in shadow education in China.

Reliable cross-national data are therefore greatly needed to allow researchers to understand the impact of policies on the demand for private tutoring. Institutional leaders and teacher-scholars should develop management policies that ensure educators cover the whole curriculum so that private tutoring does not displace classroom teaching and, more importantly, does not distort the original purpose of education in China (Trent, 2016). Despite the fact that PST activities have often been ignored by the EFA movement since the early 1990s, shadow education is now highly evident in the most recent *2013/2014 EFA Goal Monitoring Report* as noted in a section entitled 'Private tutoring versus classroom teaching: protecting the poorest' (UNESCO, 2014:271–272). The report emphasises that strategies should at least be in place to prevent the tutoring of pupils by teachers who are responsible for teaching them in their daily classes. This would ensure that full curriculum coverage is available for all, even those unable to afford supplementary tutoring.

In short, this chapter urges education policy-makers and educators to expand research efforts on shadow education in the field of comparative and international education. Furthermore, it encourages policy leaders and senior officials to hold informal dialogue² on the role and function of private tutoring industries and to consider how shadow education sits in relation to UNESCO's EFA goals. New research should examine the relationship between shadow education

and academic performance, and how the effects of shadow education relate to social and economic backgrounds. In addition, empirical research examining the connections between PST and well-being (e.g. student satisfaction levels, health status and labour-market outcomes) would be highly relevant. By expanding the scope of research on shadow education, our understanding of the impact of PST on Chinese education can be enhanced, and steps taken to ensure private tutoring can provide every child, regardless of their background and the type of school they attend, an equal chance of receiving a 'quality education' that aligns closely with the United Nations 2030 Agenda for Sustainable Development.

Individual/group task

- What are the advantages and disadvantages for pursuing shadow education activities in China? What are the opportunities and challenges?
- Do you think that shadow education has a significant effect on Chinese students' academic achievement? Why or why not?
- In your opinion, what policy agendas and outcomes should the government take to combat the growth of shadow education activities?
- How can policy-makers and educators help rural-poor students perform well on high-stakes entrance examination in China?

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Recommended reading

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