WEI ZHANG AND MARK BRAY

6. SHADOW EDUCATION

The Rise and Implications of Private Supplementary Tutoring

INTRODUCTION

Private supplementary tutoring beyond the hours of formal schooling is widely known as shadow education (e.g., Bray, 1999, 2009; Buchmann et al., 2010; Stevenson & Baker, 1992). It only exists because of the existence of mainstream education. Much of the curriculum in the shadow mimics the curriculum in the schools, and the shadow sector grows as the school sector grows.

Shadow education has become increasingly prominent in many parts of the world. East Asian societies, such as South Korea, Japan and Taiwan, have particularly high proportions of students receiving shadow education (Bray & Lykins, 2012; Kim & Lee, 2010; Liu, 2012). The phenomenon significantly expanded in former Soviet countries and Eastern Europe after the political transitions of the late 1980s and early 1990s (Silova et al., 2006; Silova, 2010); and many African countries have also seen a notable increase in shadow education (Antonowicz et al., 2010; Buchmann, 2002; Napporn & Baba-Moussa, 2013). Participation in tutoring is also high in parts of Southern Europe (Bray, 2011; Lamprianou & Afantiti Lamprianou, 2013), and is becoming significant in North and South America (Davies & Aurini, 2006; Diskin, 2010; Sunderman, 2007; Ventura & Gomes, 2013). Thus in effect shadow education has become a global phenomenon.

The development of shadow education is shaped by macro-level factors such as economic growth, cultural traditions and government policies, and micro-level factors including family structures, socio-economic disparities and school-level policies (Kwok, 2010; Pallegedara, 2012; Safarzyńska, 2013; Silova, 2009; Tan, 2009). Tutoring has important implications for both the immediate stakeholders and the wider society. It may compensate for shortcomings in mainstream education, increase learning for human capital accumulation, and provide employment and incomes for tutors. At the same time, tutoring may distort mainstream curricula, and exacerbate social inequalities. Where tutoring is provided by mainstream teachers to pupils for whom they already have responsibilities in regular schools, dangers arise of teachers' malpractice and corruption (Brehm et al., 2012; Dawson, 2009; Heyneman, 2011; Vu et al., 2011).

As in other parts of the world, shadow education has become a major phenomenon in China. Xue and Ding (2008, p. 3), drawing on a household education and

S. Guo & Y. Guo (Eds.), Spotlight on China: Changes in Education under China's Market Economy, 85–99.

employment survey, indicated that in 2004 55% of urban households were investing in supplementary lessons for academic and non-academic subjects. Another study that focused only on academic subjects found that 75% of sampled Grade 10 pupils in Gansu, Hunan and Jiangsu Provinces had received tutoring in Grade 9 (Shen, 2008, p. 3). A third study of Grade 12 students in Jinan, Shandong Province, found that 29.3% were receiving shadow education in English, 28.8% were doing so in mathematics, and 11.6% were doing so in Chinese (Zhang, 2011, p. 124). Shadow education is delivered in a variety of forms ranging from one-to-one tutoring to large-scale lectures. The providers of tutoring are a matrix of commercial tutoring enterprises, college students, professional tutors, and school teachers.

A final introductory remark concerns definitions. This chapter is primarily concerned with tutoring in academic subjects beyond school hours that is received in exchange for a fee. This definition is widely used, but some researchers have used definitions that encompass non-academic activities including sports and art, and some have included fee-free forms of tutoring. These matters will be noted where relevant when referring to specific studies.

THE CONTEXT FOR EXPANSION OF SHADOW EDUCATION

Chinese cultural traditions emphasize diligence and respect for education; and the dramatic economic growth of the past few decades has given Chinese families disposable incomes to invest in various forms of education, including shadow education (Lei & Chung, 2003; Shen & Du, 2009). In addition, the one-child policy has allowed increased household incomes to be concentrated on a reduced number of children. Educational reforms in the past three decades have stimulated the development of private tutoring companies and intensified competition between families.

These changes have been linked to the socialist market economy, for which the framework was set in 1978 (Shi & Zhang, 2008). The financing and administration of education has moved away from a highly centralized system with a narrow revenue base to a hierarchical system with diversified revenue (Ministry of Education [MoE], 2004a, 2004b; Tsang, 1996). Market forces in the education sector have increased disparities, particularly between rural and urban areas, and have changed the roles of teachers (Guo et al., 2013). The proliferation of private tutoring institutions and the increased acceptability of the notion that teachers may receive extra incomes for extra tutoring services have been part of this wider shift.

Also relevant has been the expansion of higher education, which has greatly improved the opportunities for high school graduates to go to university. In 1990, only 27.3% of high school graduates could enter higher education, but in 2011 the promotion rate from upper secondary schooling to higher education reached 86.5% (MoE, 2013a). When the previously narrow gate became wider, more families considered themselves within the range of access, which in turn intensified competition between families for college admission. The National University

Entrance Examination, *Gaokao*, has become an increasingly competitive battleground among high school students for admission to high-status universities, and pressures in the senior grades of secondary education have in turn intensified at lower levels. Lower secondary students compete for admission to key upper secondary schools through the Senior High School Entrance Examination, *Zhongkao*. In turn, primary students compete for admission to high-status lower secondary schools, and kindergarten children compete for high-status primary schools.

The government has a tradition of building and maintaining elite public schools to facilitate the training of talented students for China's modernization, and to act as exemplary schools for wider improvement of education (Lin, 1999, p. 44). Although the formal identification of institutions as key schools has been removed, informal labels persist (Yu & Ding, 2011). These schools select high-achieving students through city-wide and region-wide examinations, recruit the best teachers, receive favorable government funding, and construct enviable school facilities. To strive for entry to prestigious schools and universities, many parents resort to shadow education in the hope that it will secure their children's success in the *Zhongkao* and *Gaokao* examinations (Jiang, 2011; Shi & Zhang, 2008; Yu & Ding, 2011).

The *Gaokao* in particular has been criticized for nourishing the examination-orientation that has reduced schooling to "a soulless competition" (Ross & Wang, 2011, p. 211). Curriculum reforms aiming to promote students' whole-person development have shortened school hours and reduced homework and classroom examinations (China, 2010, p. 21). However, instead of lessening the study burden, the measures seem to have increased the anxieties of parents, students, teachers and school leaders. Some stakeholders view tutoring as a strategy to make up the missing school hours (Zhang, 2013).

With regard to financial dimensions, the state has encouraged the running of schools by individual citizens (MoE, 2002), and many tutoring companies have also emerged. A new salary system was launched at the level of compulsory education in 2009 for the purpose of regulating teachers' incomes and promoting effectiveness (Zhuang, 2010). Merit pay was added to the salary system to supplement basic wages and various allowances. The reform has mainly benefited senior teachers and school leaders, and has generated less benefit for junior teachers (Zhou, 2011). Since the major responsibilities for funding the merit pay are borne by local governments, low-income districts and counties have been handicapped in implementing the policy. Disparities in the distribution of teachers' incomes have increased competition among teachers and driven some of them to generate extra incomes through shadow education. Further, insofar as merit pay is partly based on students' examination performance, teachers have a double reason for engaging in shadow education: first to earn direct revenue, and second to raise their students' scores and thus secure merit payments (Xu, 2009; Zhang, 2013).

SCALE AND FEATURES OF SHADOW EDUCATION

Although empirical data on shadow education are missing in most regions in China, the existing literature provides some evidence on the scale of tutoring (Table 1). Various studies show that in many locations at least half the students receive private tutoring, and in some places it reaches three quarters.

Some studies also provide further information. Concerning the costs of tutoring, for example, Lei (2005) analyzed data from 10,513 Grade 12 students in 90 high schools in Beijing, Jiangsu, Hubei, and Shanxi, and found that 11% of the education expenditure was devoted to tutoring. Xue and Ding (2008) indicated that primary students spent an average of RMB 693 per month on both academic tutoring and non-academic training, and that lower secondary students spent RMB 710. Tang (2009) stated that in Shenzhen participants in academic tutoring paid RMB 2,670 for tutoring per semester, accounting for 3.4% of the annual household income. The respective figures for Wuhan were RMB 1,340 and 3.7%. In Chongqing, one third of the tutoring participants in Zhang's (2013) sample reported that tutoring consumed over 10% of their monthly household incomes. Another third spent an estimated 6-10% on tutoring.

Table 1. Indicators of the extent of shadow education in China

Region(s)	*Year*	*Origin/nature of data*	*Sample*	*Participation rate*	*Source*
Urban China	2004	2004 Urban Household Education and Employment Survey; data including both academic tutoring and non-academic training	4,772 urban households with a child receiving education from pre-primary to higher education	Primary: 73.8% Lower secondary: 65.6% Upper secondary: 53.5%	Xue & Ding, 2008
China	2007	Survey of Household Expenditure on Compulsory Education; data include both academic and non-academic tutoring	18,645 households in 18 areas	Overall: 47.4% Primary: 52.3% Lower secondary: 39.6%	Chu, 2009

(Continued)

Table 1. (Continued)

Region(s)	*Year*	*Origin/nature of data*	*Sample*	*Participation rate*	*Source*
Shenzhen and Wuhan	2008	Empirical study of tutoring in Shenzhen and Wuhan (Hubei Province)	718 primary Grade 5-6 and lower secondary Grade 7-9 students	Primary: 71.1% Lower Secondary: 71.6%	Tang, 2009
China	2008	Empirical study of tutoring received by lower secondary students Gansu, Hunan and Jiangsu	789 Grade 10 students on their participation in private tutoring in Grade 9	Overall: 74% Urban schools: 82.8% Poor counties: 66.1%	Shen, 2008; Tsang et al., 2010
Gansu Province	2010	Empirical study in six lower secondary schools in Lanzhou, Wuwei and Linxia	1,101students in Grades 7-9	Overall: 58.8% In Mathematics: 36.7% In English: 48.5% In Physics: 20.5%	Ma, 2011
Jinan, Shandong Province	2010	Tutoring received by students in public high schools	6,043 Grade 12 students	Overall: 48.6% In Mathematics: 23.1% In English: 18.2% In Chinese: 6.6%	Zhang, 2011
Taiyuan, Shanxi Province	2011	Survey in six lower secondary schools	479 Grades 7-9 (lower secondary) students	Overall: 76.2% In Mathematics: 54.4% In English: 48.9% In Chinese: 45.6%	Fan, 2012
Chongqing	2011	Tutoring received by Grade 9 students within the six months before September and October, 2011	860 Grade 9 students	Overall: 43.6% In Mathematics: 33.2% In English: 32.0% In Physics: 25.1%	Zhang, 2013

Providers of Tutoring

Major providers of tutoring include commercial enterprises, individuals such as college students who operate on an informal basis, and school teachers who provide tutoring in addition to their regular duties. Commercial enterprises may train their own professional tutors and/or hire college students at a relatively low cost, and may recruit school teachers who can attract tutees through their reputations and/or relations (Li, 2010; Zeng, 2012; Zhang, 2013). Li (2010) conducted a qualitative study of tutoring enterprises in Liaoning Province. The for-profit enterprises were mainly located in developed urban areas, proliferating in busy streets in the city center or near schools. They were usually staffed by teachers, college students/graduates, and unemployed people with teaching experience. A few enterprises also employed foreigners. Most tutoring centers had marketing teams in addition to teaching teams. Major enterprises also had teams for curriculum development and management.

Some studies have addressed the problematic dimensions of the tutoring enterprises in an under-regulated market. Some of the tutoring centers investigated by Li (2010) indicated that all the tutors were senior teachers from schools, but in reality many tutors were college graduates or postgraduate students. Similar misrepresentation was found by Zhang (2013) in Chongqing, and included false advertising. In addition, some tutoring centers paid school leaders to help advertise the centers' services and to recruit students and teachers.

Prestigious teachers (*mingshi*) have strong market appeal built on their reputations from the examination success of former students. In Chongqing, some students reported that teachers provided better tutoring than other types of tutors, and that their own school teachers were more capable of meeting their individual needs (Zhang, 2013). Shen (2008) compared the effectiveness of tutoring provided by different types of tutors and found that tutoring provided by mainstream teachers, especially *mingshi*, had the most positive impact on the tutees' academic performance. The availability of *mingshi* in the market permits students from lower ranking schools to enjoy some of the educational resources from key schools.

Yet despite the perceived effectiveness of tutoring by serving teachers, many dimensions of this form of tutoring are problematic, especially when teachers tutor students for whom they already have responsibilities at school. Mass media have reported cases in which teachers force their own students to attend their tutoring classes, or extract their students' consumer surplus by "saving" parts of the curriculum during official class hours for the private lessons (Ban, 2010; Huang, 2007). In an alternative arrangement, teachers refer their students to colleagues on a reciprocal basis rather than tutoring the students themselves. Zhang (2013) observed that in Chongqing some teachers treated students who attended their tutoring classes with more attention in regular teaching, special training for *Zhongkao* preparation, and extra teaching materials with questions from past papers.

The prevalence of tutoring by serving teachers can be explained by many factors, including teachers' incomes, respect and trust from parents and students, the

evaluation system that stresses examination results, disparities in school quality, and competition among students (Ban, 2010; Huang, 2007; Ma, 2011). As noted above, teachers may find ways to force tutoring on their students. Sometimes, teachers are also "forced" to provide tutoring by demands from students and parents. Peer pressure pushes some students to receive tutoring, and some teachers get involved in shadow education under the influence by their colleagues. The market economy has gradually changed people's thinking, with growing acceptability of teachers generating extra incomes through shadow education.

At the national level, the authorities mainly seek to guide teachers' behavior through promotion of ethics. The Rules of Professional Ethics of Teachers state that teachers "should reject paid tutoring with consciousness, and should not gain personal profit from their positions as teachers" (MoE, 2008, item 5). In 2013, as the problematic dimensions tutoring attracted growing attention, further regulations were issued to enhance the construction and development of teachers' professional ethics. The Ministry of Education (MoE, 2013b) not only stressed the importance of education, advocacy and supervision, but also proposed establishment of a punishment system.

Provincial governments, district governments and schools may have additional regulations. For example, the Chongqing authorities only restrict teachers from providing tutoring on weekdays, and slightly over 90% of the tutoring participants in Zhang's (2013) study reported having been tutored by school teachers. By contrast, regulations in Guangdong, Xinjiang, Tianjin, Jiangsu, and Shandong prohibit teachers from providing tutoring at any time (Bray & Kwo, 2014; Kwok, 2010; Xu, 2009). Yet while these policies are well-intentioned, they may not be effective. For instance, the regulations of the Shandong Provincial Education Department (2009) stipulate that teachers should not provide tutoring, should not mobilize students to receive tutoring, and should not organize tutoring activities. However, Zhang's (2011) study in Jinan suggested that about half of the rural students receiving tutoring were tutored by school teachers. In Guangzhou, regulations state that teachers in public schools will be severely penalized for providing private tutoring to their own students. If they are found to provide such tutoring, the regulations declare, their teaching professional titles will be downgraded; they will be disqualified from promotion and upgrading; in some regions their schools will be demoted from city level to county level; and principals will be demoted to frontline teachers or even dismissed from their posts. Yet according to Kwok (2010, p. 55), despite the severe declared penalties 60% of public school teachers in major cities still provide tutoring to their daytime students.

Patterns of Demand and Impact

The indicators presented in Table 1 reflect dimensions of demand. Generally, English and mathematics are among the most popular subjects for private tutoring. Some studies have suggested that students in primary schools receive more shadow

education than counterparts in upper secondary schools. This pattern may reflect the longer hours of schooling at higher levels, which leave students with less time for tutoring. Moreover, studies that include non-academic training are likely to expose greater quantities of tutoring at lower ages. Zhang's (2013) research in Chongqing study with a sole focus on the academic dimension found that more students in Grade 9 participated in tutoring than in Grade 12 when students were occupied by the busy school schedule and received more intensive training for *Gaokao* provided by formal schools.

A number of studies suggest that students residing in urban areas and those from higher socio-economic status are more likely to receive shadow education (Lei, 2005; Peng, 2008; Shen, 2008; Tsang et al., 2010; Xue & Ding, 2008). Rather than a remedial strategy for low achievers, the demand for tutoring comes more from high-achieving students. Shen (2008) and Zhang (2013) found that compared to students enrolled in ordinary schools, those in elite schools were more likely to use private tutoring. The finding matched Peng's (2008) study in Wuhan, which indicated that students' participation rates in tutoring were positively correlated with the quality of the schools in which they were enrolled. Such pattern is associated with the peer pressure and high level of competitiveness in key schools. The tutoring industry has benefited from student and parental uncertainties and unease caused by mainstream education. Schools with strong reputations for academic achievement have strongly competitive environments and high student academic aspirations, which in turn contribute to demand for tutoring.

Table 2 builds on the previous literature and shows the patterns of demand on a range of variables. It shows a general picture, which may not hold in all parts of the country and for all communities, but nevertheless reflects the principal findings of research. Students were more likely to receive tutoring in urban than rural areas, in elite schools, and during the periods of compulsory education.

Although examinations are frequently cited as one of the most important determinants of demand for tutoring, the extent to which different types of tutoring actually help to raise examination scores remains an open question. Few empirical studies have been conducted on the impact of shadow education, which in any case is difficult to measure because multiple variables enter the equation. Xue and Ding (2008) found negative correlations between expenditures on tutoring and tutees' academic achievement, but the reasons for this pattern need further analysis. In any case, Lei's (2005) analysis of data collected from 10,513 Grade 12 students suggested a positive correlation. Zhang's (2011) study based on data collected in Jinan from 6,043 upper secondary students indicated that tutoring may have positive impact on the *Gaokao* results of urban students with lower achievement or in schools with lower quality. However, the study found a negative correlation between tutoring and the *Gaokao* scores of rural students (p. 21). The study also found variations among subjects: tutoring had a small but statistically significant effect on mathematics test scores, but no statistically significant effect on Chinese test scores. One explanation might be that the time students spent on tutoring was limited and that Chinese

Table 2. Distribution of participation in tutoring and relevant factors

Factors		*Distribution of participation in tutoring*
Regions		Urban area > rural area; East China > Central China > Western China; Metropolitan area > county/town > village;
Level of education		Compulsory education levels > post-compulsory levels
Grades		Grades at transitional points > other grades
School	Type	Public school > private school; Ordinary school > vocational school
	Quality	Elite school > key school > ordinary school
Household/ individual factors	Socio-economic status	Higher income families > lower income families; Parents with higher levels of education > parents with lower levels of education
	Number of siblings	The only child > with siblings
	Academic performance	Top students > above average > average > below average Attention to extremes: gifted and inferior (focus of investigation including tutoring for national contests)

Sources: Chu, 2009; Lei, 2005; Liu, 2012; Ma, 2011; Peng, 2008; Shen, 2008; Tang, 2009; Tsang et al., 2010; Xue & Ding, 2008; W. Zhang, 2013; Y. Zhang, 2011.

language requires longer period of learning (tutoring) for the effect to be significant. The contradictory nature of these findings underlines the need for further research to identify what types and durations of tutoring are desirable for what types of students at different stages of their careers and in different subjects.

A further component of this research agenda would be the question whether and for whom shadow education is viewed primarily as an enrichment strategy for students who are already successful or a remedial strategy for slow learners and disadvantaged students. These matters are again difficult to disentangle, because elite students whose performance drops from the top to the middle of the class might view shadow education as a remedial strategy even though their performance is considerably ahead of the overall body of students in ordinary schools.

These themes also raise questions about distribution of educational opportunities. The government espouses fee-free education on the grounds of equality of opportunity, but even when public education is free up to Grade 9, shadow education consumes considerable proportions of household income. If families find themselves pressured to invest in shadow education when they would prefer not to do so, issues of ideology behind the façade of free education are invoked (Bray & Kwo, 2013).

In addition to the financial burden on families, tutoring exerts some negative impact on education. It adds to the study load on pupils, and occupies time that could have been spent on other activities for overall development. Instead of facilitating real learning, much tutoring aims at training in examination skills. Some students and parents treat shadow education as a temporary remedy to their psychological unease solely due to peer pressure and the stress of high-stakes examinations. These run counter to the goal of formal education and intentions of curriculum reforms. Serving teachers' involvement in the business seemed to strengthen the backwash of shadow education on formal schooling. According to Ban (2010), Huang (2007) and Zhang (2013), some students and parents viewed teachers' recommendations as effective ways to find a good tutor, and considered tutoring by teachers more effective than other modes of tutoring. In comparison, some students reported the low quality of tutoring given by college students without teaching qualifications. However, in many cases teachers and school leaders tried to make students attend their tutoring classes by treating the tutees with special privileges, or received referral commission by introducing students to tutoring centers. Such malpractice corrupts the school system. Self-employed teachers and other individuals providing tutoring on an informal basis generate incomes without paying taxes.

IMPLICATIONS FOR POLICY AND FURTHER STUDIES

The chapter has noted patterns of demand for shadow education leading to social inequalities, the backwash on regular schooling, and elements of corruption. The phenomenon arguably needs regulation for the protection of both consumers and the wider society. Individuals who provide tutoring informally cannot easily be regulated because they are difficult to track. For these tutors, as well as for other categories of tutoring providers, attention could be given to informing and guiding the consumers. Companies and teachers who provide tutoring can be regulated more easily.

The starting point for regulating tutoring companies may be requirements on registration in terms of finance, staff, fees, advertising, safety and management. Some provincial and local governments have attempted to get tutoring enterprises to register through joint management of local education bureaus and other departments. For instance, the Chongqing municipal government issued regulations allocating responsibilities to local education authorities, departments of commerce, departments of commodity prices, and public security departments, and fire departments. Requirements for registration of tutorial centers focus on financial frameworks, buildings and facilities, management, advertising and prices (Zhang, 2013). Education bureaus are responsible for evaluation and approval of the tutoring centers, but little attention has been given to the curriculum, teaching materials or modes of tutoring. Moreover, the distribution of responsibilities across several departments lacking effective mechanisms for monitoring and enforcement has increased difficulties in implementing the regulations.

Concerning teachers who provide tutoring, Bray and Kwo's (2014) cross-national analysis identified four types of regulations. Some governments prohibit such tutoring; others discourage through codes of ethics; yet others permit such tutoring if approved within the administrative hierarchy; and others have laissez faire approaches which allow the marketplace to operate without intervention. In the Chinese context, laissez faire is certainly not a wise approach given the negative consequences of teachers' involvement in tutoring and possible corrupting practices. The other three categories may be adopted at different levels of governance according to the circumstances. Since current patterns in which teachers provide extra private tutoring stem from parents' and students' trust and the teachers' professional expertise, and are partly the result of market forces, elimination of this mode may not be fully desirable or possible. Regulations are arguably desirable to prohibit teachers from tutoring their own students, in order to avoid conflict of interest, but for tutoring of other students a desirable approach might focus on professional ethics for self-regulation. Controls on the extent to which teachers can provide supplementary private tutoring might also be built into the regulations for tutoring enterprises and schools. School leaders may hold a firm stance in discouraging tutoring and penalizing teachers who violate school regulations. Policy at the school level could also adopt the third approach noted above – permission – though this may require extra administrative work for evaluation and monitoring.

The tutoring industry has benefited from the growing demand by the consumers, i.e. parents and students, which may be rational or may be fuelled by anxieties that are not well grounded. Parents and students may be educated to make reasonable decisions, for instance on when tutoring is and is not needed, and may be alerted to the hazards as well as the benefits that accompany various choices. The purposes for tutoring may include remedial work to make up for missed classes, enrichment to stretch further, and tailoring lessons to individual needs. Yet tutoring can add pressures on young people, and the teaching and learning approaches in the tutoring sessions may not match those in the schools. Further, some tutoring companies engage in false advertising. To handle such situations, effective mechanisms are necessary for parents and students to seek information and advice, and to make complaints.

The patterns of demand for shadow education presented in this chapter are closely linked to features of the formal education system. In particular, the *Gaokao* and *Zhongkao* are major drivers of demand. Because they are vital to the selection of students and evaluation of teachers and schools, they push students to receive tutoring and teachers to provide tutoring. At the level of compulsory education, reduction in the weight of examinations for assessment and evaluation might lessen the pressures, and changes in content may shift the curriculum of tutoring from examination-orientated training/drilling to real learning and whole-person development. Yet reforms often encounter unanticipated side-effects. One result of efforts by the national government (China, 2010) to alleviate study burdens through shortened school hours and reduced school work has been

increased demand for tutoring by parents, students and teachers in order to bridge perceived gaps. One way forward might be to give schools and local authorities more discretion to decide on the extent to which school work should be lessened and school schedules changed according to local contexts and institutional specifics.

The demand patterns noted the higher participation in tutoring among students in the developed regions, in urban areas, from students of more prosperous family backgrounds, and in schools of better quality. These patterns add to the existing inequalities in formal education. Governments at different levels may continue their efforts to promote balanced development of education by strengthening support to schools in poorer regions and by raising the quality of low-ranking schools. In rural areas where little tutoring is available through commercial channels, free tutoring provided by the schools may help students with learning difficulties.

Ideally, policy decisions should be built upon sound empirical studies. Literature on shadow education in China has been growing, but some studies have had weak methods and vague conceptualizations of tutoring. More research on the nature and impact of shadow education will extend understanding. This chapter has especially been concerned with tutoring in academic subjects, though recognizes that tutoring in other domains may also be important for social and economic development. More information is needed on the nature of different types of tutoring and on the impact of tutoring on learning. Whatever the definitions adopted by researchers, it is clear that shadow education has greatly expanded in China during the last three decades, and is likely to continue to expand.

Finally, returning to the wider picture with which this chapter commenced, patterns in China may be compared with those in other parts of Asia and beyond. Shadow education was once associated particularly with East Asian societies such as Japan, South Korea and Taiwan but has now become a global phenomenon. The introduction of the market economy has allowed the shadow education in China to 'catch up' with patterns in other parts of East Asia. Indeed on the present trajectory shadow education seems set to become a standard component in the lives of young people at all levels of education, especially in urban areas and increasingly also in rural areas. Shadow education is also growing in other parts of the world, including Africa, North America and South America, though in China already seems to be greater in scale.

Nevertheless, shadow education in China is not yet as entrenched as it is in South Korea, for example. The authorities therefore still have opportunities to shape the phenomenon. In this process they may recognize the positive sides of expanding the learning of young people, contributing to human capital, and harnessing the different resources in society. On the other side, they may seek to alleviate excessive burdens on young people, avoid corrupting influences, and seeking harmony between in-school and out-of-school learning.

REFERENCES

Antonowicz, L., Lesné, F., Stassen, S., & Wood, J. (2010). *Africa education watch: Good governance lessons for primary education*. Berlin: Transparency International.

Ban, Y. T. (2010). The paid tutoring that I have experienced. *Sohu Education* [in Chinese]. Retrieved from http://learning.sohu.com/20100415/n271541647.shtml

Bray, M. (1999). *The shadow education system: Private tutoring and its implications for planners* (Fundamentals of Educational Planning 61). Paris: UNESCO International Institute for Educational Planning (IIEP).

Bray, M. (2009). *Confronting the shadow education system: What government policies for what private tutoring?* Paris: UNESCO International Institute for Educational Planning (IIEP).

Bray, M. (2011). *The challenge of shadow education: Private tutoring and its implications for policy makers in the European Union*. Brussels: European Commission.

Bray, M., & Kwo, O. (2013). Behind the façade of fee-free education: Shadow education and its implications for social justice. *Oxford Review of Education*, *39*(4), 480–497.

Bray, M., & Kwo, O. (2014). *Regulating private tutoring for public good: Policy options for supplementary education in Asia*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Bangkok, UNESCO.

Bray, M., & Lykins, C. (2012). *Shadow education: Private supplementary tutoring and its implications for policy makers in Asia*. Mandaluyong City: Asian Development Bank, and Hong Kong: Comparative Education Research Centre, The University of Hong Kong.

Brehm, W., Silova, I., & Tuot, M. (2012). *The public-private education system in Cambodia: The impact and implications of complementary tutoring*. Budapest: Open Society Foundations.

Buchmann, C. (2002). Getting ahead in Kenya: Social capital, shadow education, and achievement. *Research in Sociology of Education, 13*, 135–161.

Buchmann, C., Condron, D. J., & Roscigno, V. J. (2010). Shadow education, American style: Test preparation, the SAT and college enrollment. *Social Forces, 89*(2), 435–462.

China, People's Republic of (2010). *Outline of China's national plan for medium and long-term education reform and development (2010–2020)* [in Chinese]. Beijing: People's Publishing House.

Chu, H. L. (2009). The impact of family background and personal characteristics on the participation in supplementary education in Mainland China. *Education Research Monthly* [in Chinese]*, 12*, 22–27.

Davies, S., & Aurini, J. (2006). The franchising of private tutoring: A view from Canada. *Phi Delta Kappan, 88*(2), 123–128.

Dawson, W. (2009). The tricks of the teacher: Shadow education and corruption in Cambodia. In S. Heyneman (Ed.), *Buying your way into heaven: Education and corruption in international perspective* (pp. 51–74). Rotterdam, The Netherlands: Sense Publishers.

Diskin, K. S. (2010). *Private tutoring: An intersection of economic interests and social capital* (PhD thesis). Walden University, Minneapolis, MN.

Fan, Y. L. (2012). *A research on supplementary tutoring of junior students in Taiyuan* (Masters thesis) [in Chinese]. Shanxi University of Finance and Economics, China.

Guo, S., Guo, Y., Beckett, G., Li, Q., & Guo, L. (2013). Changes in Chinese education under globalisation and market economy: Emerging issues and debates. *Compare: A Journal of Comparative and International Education*, *43*(2), 244–264.

Heyneman, S. P. (2011). Private tutoring and social cohesion. *Peabody Journal of Education*, *86*(2), 183–188.

Huang, S. H. (2007). *Paid tutoring by teachers at urban primary and secondary schools* (Masters thesis) [in Chinese]. Northeast Normal University, Changchun.

Jiang, K. (2011). Origin and consequences of excess competition in education: A Mainland Chinese perspective. *Chinese Education and Society, 45*(2), 8–20.

Kim, S., & Lee, J. H. (2010). Private tutoring and demand for education in South Korea. *Economic Development and Cultural Change, 58*(2), 259–296.

Kwok, P. (2010). Demand intensity, market parameters and policy responses towards demand and supply of private supplementary tutoring in China. *Asia Pacific Education Review, 11*(1), 49–58.

Lamprianou, I., & Afantiti Lamprianou, T. (2013). Charting private tutoring in Cyprus: A socio-demographic perspective. In M. Bray, A. E. Mazawi, & R. G. Sultana (Eds.), *Private tutoring across the Mediterranean: Power dynamics and implications for learning and equity* (pp. 29–56). Rotterdam, The Netherlands: Sense Publishers.

Lei, W. P. (2005). Expenditure on private tutoring for upper secondary students: Determinants and policy implications. *Education and Economy* [in Chinese], *1*, 39–42.

Lei, W. P., & Chung, Y. P. (2003). An empirical study of the expenditure on education of the rural families in China: 1985–1999. *Theory and Practice of Education* [in Chinese], *7*, 38–42.

Li, B. (2010). *A qualitative study on private tutoring enterprises serving primary and secondary pupils* (Masters thesis) [in Chinese]. Liaoning Normal University, Dalian.

Lin, J. (1999). *Social transformation and private education in China*. New York, NY: Praeger.

Liu, J. (2012). Does cram schooling matter? Who goes to cram schools? Evidence from Taiwan. *International Journal of Educational Development, 32*(1), 46–52.

Ma, H. X. (2011). *The status and influence factors of private tutoring of urban lower secondary school students: A case study in Gansu Province* (Masters thesis) [in Chinese]. Northwest Normal University, Lanzhou.

Ministry of Education (MoE). (2002). *Law on the promotion of non-public schools of the people's republic of China*. Beijing: Ministry of Education. Retrieved from http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_619/200407/1317.html

Ministry of Education (MoE). (2004a). *Basic facts about the development of Chinese education* [in Chinese]. Beijing: Ministry of Education. Retrieved from http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_163/200408/2692.html

Ministry of Education (MoE). (2004b). *Basic facts about Chinese higher education* [in Chinese]. Beijing: Ministry of Education. Retrieved from http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_163/200408/2909.html

Ministry of Education (MoE). (2008). *Rules of professional ethics of teachers in primary and secondary schools* [in Chinese]. Beijing: Ministry of Education.

Ministry of Education (MoE). (2013a). *Educational statistics in 2011* [in Chinese]. Beijing: Ministry of Education. Retrieved from http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s7382/index.html

Ministry of Education (MoE). (2013b). *Opinions on establishing long-term mechanism for constructing professional ethics of teachers in primary and secondary schools* [in Chinese]. Beijing: Ministry of Education. Retrieved from http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s7085/201309/xxgk_156978.html

Napporn, C., & Baba-Moussa, A. R. (2013). Accompagnement et soutien scolaires: l'expérience béninois. *Revue international d'éducation – Sèvres, 62*, 1–10.

Pallegedara, A. (2012). Demand for private tutoring in a free education country: The case of Sri Lanka. *International Journal of Education Economics and Development, 3*(4), 375–393.

Peng, P. (2008). *An empirical research on supplementary tutoring of compulsory education students: Based on the survey and analysis in Hongshan District, Wuhan* (Masters thesis) [in Chinese]. Huazhong Normal University, Wuhan.

Ross, H., & Wang, Y. M. (2011). Reforming the college entrance examination: Epicenter of tension, change, and resistance. In T. Huang & A. W. Wiseman (Eds.), *The impact and transformation of education policy in China* (pp. 209–236). Bingley: Emerald.

Safarzyńska, K. (2013). Socio-economic determinants of demand for private tutoring. *European Sociological Review, 29*(2), 139–154.

Shandong, Province. (2009). *Regulations on compulsory education in Shandong Province* [in Chinese]. Jinan. Retrieved from http://www.sdedu.gov.cn/sdedu_zxwj/200912/t20091202_61278.htm

Shen, B. F., & Du, X. L. (2009). Educational expenditure of urban families: A case study. *Theory and Practice of Education* [in Chinese], *29*(4), 21–25.

Shen, H. (2008). An investigation on factors influencing private supplementary tutoring at the level of compulsory education. *Economics of Education Research (Beida)* [in Chinese], *6*(3), 1–10.

Shi, Z. Y., & Zhang, X. Q. (2008). Education reform: Experience from China. *Journal of Beijing Normal University (Social Science), 5*, 22–32.

Silova, I. (Ed.). (2009). *Private supplementary tutoring in Central Asia: New opportunities and burdens*. Paris: UNESCO International Institute for Educational Planning (IIEP).
Silova, I. (2010). Private tutoring in Eastern Europe and Central Asia: Policy choices and implications. *Compare: A Journal of Comparative and International Education, 40*(3), 327–344.
Silova, I., Būdiene, V., & Bray, M. (Eds.). (2006). *Education in a hidden marketplace: Monitoring of private tutoring*. New York, NY: Open Society Institute.
Stevenson, D. L., & Baker, D. P. (1992). Shadow education and allocation in formal schooling: Transition to university in Japan. *The American Journal of Sociology*, *97*(6), 1639–1657.
Sunderman, G. L. (2007). *Supplemental education services under NCLB: Charting implementation. Policy Brief, the Civil Rights Project*. Berkeley, CA: University of California at Los Angeles.
Tan, J. (2009). Private tutoring in Singapore: Bursting out of the shadows. *Journal of Youth Studies (Hong Kong)*, *12*(1), 93–103.
Tang, L. J. (2009). *Factors influencing participation in private tutoring at the level of compulsory education - Based on the survey and analysis in Wuhan and Shenzhen* (Master's thesis) [in Chinese]. Huazhong Normal University, Wuhan.
Tsang, M. C. (1996). Financial reform of basic education in China. *Economics of Education Review, 15*(4), 423–444.
Tsang, M. C., Ding, X. H., & Shen, H. (2010). Urban-rural disparities in private tutoring of lower-secondary students. *Education and Economics* [in Chinese], *2*, 7–11.
Ventura, A., & Gomes, A. (2013). Supplementary education in Brazil: Diversity and paradoxes. In J. Aurini, S. Davies, & J. Dierkes (Eds.), *Out of the shadows: The global intensification of supplementary education* (pp. 129–151). Bingley: Emerald.
Vu, X. N. H., Ngo, M. T., Ta, M. T., & Nguyen, M. T. (2011). *Forms and effects of corruption on the education sector in Vietnam*. Hanoi: Towards Transparency (TT) and Transparency International (TI).
Xu, Z. F. (2009). *Qualitative research on the impact factors why households choose the after-class tutoring in Lanzhou* (Masters thesis) [in Chinese]. Northwest Normal University, Lanzhou.
Xue, H. P., & Ding, X. H. (2008). An empirical study on private tutoring for students in urban China. *Economics of Education Research (Beida)* [in Chinese], *6*(1), 1–14.
Yang, Q. L. (2003). Home tutoring: A practical problem at the edge of teaching theory. *Education Theory and Practice* [in Chinese]*, 23*(5), 42–46.
Yu, H. X., & Ding, X. H. (2011). How to get out of the prisoners' dilemma: Educational resource allocation and private tutoring. *Frontiers of Education in China, 6*(2), 279–292.
Zeng, H. (2012). *Study on private tutoring for primary students* (Masters thesis) [in Chinese]. Northeast Normal University, Changchun.
Zhang, W. (2013). *Private supplementary tutoring received by Grade 9 students in Chongqing, China: Determinants of demand, and policy implications* (PhD dissertation). The University of Hong Kong, China.
Zhang, Y. (2011). *The determinants of national college entrance exam performance in China – With an analysis of private tutoring* (PhD dissertation). Columbia University, New York, NY.
Zhou, H. W. (2011). *Study on problems and solutions of the reform for teacher performance pay* (Masters thesis) [in Chinese]. East China Normal University, Shanghai.
Zhuang, Y. (2010). Implementing the system of teacher merit pay at the level of compulsory education. *China Education News* [in Chinese]. Retrieved from http://jijiao.jyb.cn/tbch/jsjx/

Wei Zhang
Faculty of Education
The University of Hong Kong

Mark Bray
Faculty of Education
The University of Hong Kong