

Selected Papers of Beijing Forum 2010

Shadow Education: Comparative Perspectives on the Expansion and Implications of Private Supplementary Tutoring

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Abstract:

Recent decades have brought intensification of what in some settings has been called the shadow education system of supplementary private tutoring. Pupils in regular fee-free public schools attend supplementary fee-paying classes after school, at week-ends and during vacations. This practice has received official comment in China as well as in other countries. Tutoring is especially evident during the period leading up to major examinations, but for some pupils occurs at all levels of education systems. The practice has long been ingrained in the cultures of East Asia, and is now increasingly evident in West and Central Asia, in Europe, in North America, and in Africa. Moreover, new types of tutoring over the internet are being provided across national boundaries. In this respect, tutoring is blurring geographic boundaries.

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Selection and/or peer-review under responsibility of Beijing Forum

This paper describes and analyses the phenomenon. It notes that different types of tutoring dominate in different cultures and income groups, and remarks on the forces of technology and globalisation. Shadow education brings complex implications for policy-makers and practitioners. It has positive as well as negative dimensions, and requires sophisticated analysis and greater attention from researchers in both East and West, and North and South.

1. Introduction

For most pupils around the world, the learning day does not end when the school bell rings for the end of classes. Homework must be done, to consolidate classroom learning and to prepare for the next steps. This homework may be accomplished by pupils individually or in groups, and perhaps with the assistance of family members.

In addition, growing numbers of pupils receive private supplementary tutoring. Such tutoring may also be received individually or in groups, and is sometimes received in large classes. The content may be linked to the specific lessons covered that week in school, or it may have additional material. The tutoring may be received after school hours on school days, and/or at week-ends and public holidays, and/or during school vacations.

This tutoring has become widely known in the literature as shadow education (see e.g. Stevenson & Baker, 1992; Bray, 1999; Lee et al., 2009). The label is appropriate for several reasons. First, private supplementary tutoring only exists because the mainstream education system exists; second, as the size and shape of the mainstream system change, so do the size and shape of supplementary tutoring; third, in almost all societies much more attention focuses on the mainstream than on its shadow; and fourth, the features of the shadow system are much less distinct than those of the mainstream system.

Shadow education takes different forms in different cultures. The dominant models in East Asia are different from those in South Asia; and the dominant models in Western Europe are different from their counterparts in Eastern Europe (Bray, 2009, p. 24). Even within geographic regions may be significant diversity. In East Asia, for example, differences in dominant models may be found in Japan, Hong Kong, Taiwan and South Korea (Dierkes, 2008; Kwok, 2009; Liu, 2009; Jung & Lee, 2010); and within each society is a range of types serving different categories of clients. However, some commonalities may be identified, which permits shadow education to be viewed as a global phenomenon.

The nature of tutoring is changing over time. As societies become more competitive, in part because of the forces of globalisation, school systems also become more competitive which in turn expands the demand for tutoring. Since the turn of the century, the scale and nature of tutoring have intensified in most regions of the world (Bray, 2009). Also striking is the impact of new technologies. In particular, the internet has significantly altered the geographic space within which tutoring may be provided. Some forms of tutoring are becoming globalised in which, for example, for pupils in the USA pay by credit cards for tutoring from India using the internet and web-cameras (Ventura & Jang, 2010).

The phenomenon is of growing importance in China as well as in other countries. The National Plan Outline for Medium and Long-Term Education Reform and Development (China 2010, p.15) highlighted the burden of shadow education on young people:

Heavy schoolwork is harmful to the mental and physical well-being of youngsters and to the health of the nation. It should, therefore, be cut back, so that students can learn in lively ways and grow up healthy and happy.... The behaviors of Shadow Education System such as remedial schools and of the teaching aids market shall be rectified.

However, rectification is not easy. This paper addresses some dimensions of this phenomenon. It commences by outlining the scale and nature of private supplementary tutoring. It then elaborates on the forces which are shaping the phenomenon, before turning to some of the implications.

2. Scale and nature of tutoring

Reliable data on shadow education are difficult to obtain because much tutoring is conducted on an informal basis. Tutoring establishments may not be registered, and enrolments may be unstable. Further, tutors commonly avoid taxes on their earnings and therefore dislike attention. Pupils may also hesitate to reveal the amounts of tutoring that they receive, partly because they feel shy about seeking either remedial support or competitive advantages over their peers.

Nevertheless, a picture of cross-national patterns and variations may be sketched from a range of studies. Table 1 shows that tutoring is a substantial phenomenon in many regions of the world. In some parts of East Asia, particularly Japan and South Korea, tutoring has a long history, though greatly grew in magnitude during the 1980s and 1990s (Zeng, 1999; Lee, 2010). These are prosperous countries which are influenced by Confucian cultural traditions that value learning and effort (Rohlen & LeTendre, 1996; Chan & Rao, 2009). Tutoring has also become more evident, though perhaps for different reasons, in low-income countries such as Cambodia and Bangladesh (Dawson, 2009; Hamid et al., 2009), and is increasingly being reported in Africa (see e.g. Sambo, 2001; Eilor, 2007; Paviot et al., 2008). In Eastern Europe and Central Asia, tutoring has emerged as a major enterprise following the collapse of socialism and the advent of the market economy (see e.g. Silova et al., 2006; Silova, 2009). The proportion of pupils receiving tutoring in other societies may be lower, but it has also become increasingly evident, with

different dynamics and underlying forces, in Western Europe (see e.g. Melot, 2007; Peters et al., 2009; Smyth, 2009) and North America (Gordon et al., 2005; Davies & Aurini, 2006; Mori, 2009).

Table 1: Cross-National Indicators of Supplementary Private Tutoring

Location	Patterns
Bangladesh	National survey data from 16,400 households in 2005 were compared with similar data from 33,229 households in 1998. The data showed that tutoring was substantial, and expanded over this period. In 2005, 31.0% of primary school students were receiving tutoring (28.2% in rural areas; 51.73% urban) but in 1998 21.4% of pupils were receiving tutoring (18.1% rural, 44.3% urban).
Cambodia	Respondents in 31.2% of 77 primary schools surveyed in 1997/1998 indicated that pupils received tutoring, which consumed 6.6% of the total costs of primary education. A 2004 follow-up study showed that costs increased markedly at secondary level. In the top grade of lower secondary schooling, average household costs of tutoring were over four times those in the top grade of primary schooling.
Canada	The number of tutoring businesses in major cities grew between 200% and 500% during the 1990s. In a 1997 national telephone survey, 9.4% of 501 adults with school-aged children indicated that their children received private tutoring outside school hours, and a further 8.4% indicated that their children had done so in the past.
China	The 2004 Urban Household Education and Employment survey covered 4,773 households. It indicated that tutoring was received by 73.8% of primary, 65.6% of lower secondary and 53.5% of upper secondary students.
Cyprus	A 2003 study of 1,120 college students found that 86.4% had received private tutoring when in secondary school.
Egypt	A 2004 study estimated that households devoted 61.0% of education expenditures to private tutoring. A 1997 study estimated that household expenditures on tutoring in all levels of schooling accounted for 1.6% of gross domestic product. A 1994 survey of 4,729 households found that in urban areas 64.0% of primary children with 52.0% in rural areas had received supplementary tutoring.
Hong Kong	Government statistics suggest that 34% of primary and secondary pupils received tutoring in 2006. A 2004–2005 survey of 13,600 households suggested that pupils receiving tutoring were 36.0% at the primary level, 28.0% in lower secondary, 33.6% in middle secondary, and 48.1% in upper secondary.
Japan	A 2007 survey found that tutorial schools known as juku served 15.9% of Primary 1 children, that this proportion rose steadily in later grades, and that it reached 65.2% in Junior Secondary 3. In addition, 6.8% of Junior Secondary 3 pupils received tutoring at home, and 15.0% followed correspondence courses.
Kenya	A 1997 national sample of 3,233 Grade 6 pupils found 68.6% receiving private tutoring, ranging from 39.0% in North Eastern province to 74.4% in Nyanza Province. A parallel survey in three geographically distinct districts indicated that tutoring was much more common in urban than rural areas, and among boys rather than girls.
Vietnam	In a 2001 sample survey of 72,660 Grade 5 pupils in 3,639 primary schools, 38% of pupils indicated that they were receiving tutoring. In 2002, tutoring was said to have consumed about 20% of household education expenditure. The figure peaked at 29% for pupils preparing for university entrance examinations, and was especially high in urban areas and in the Central Highlands and Southeast Regions.

Sources: Various studies reported in Bray (2009, pp.18-19).

The nature of tutoring is partly determined by class size. At one end of the scale is individualised tutoring, often in the homes of the pupils or the teachers; and at the other end of the scale are mass lecture theatres with overflow rooms served by closed-circuit television screens focusing on what in Hong Kong are called ‘idol tutors’ who in some respects resemble film stars and popular musicians (Kwok, 2009). Between these extremes may be small groups, medium-sized classes and large classes.

Diversity may also be found in the ages and qualifications of tutors. In many settings, secondary school students earn pocket money by tutoring primary school children, and similarly university students tutor secondary students. At the other end of the age scale, many tutors are retirees who wish still to contribute to society and earn some extra money. Between these two extremes of age are others who provide tutoring on a full-time or part-time basis, and who may or may not have formal training. Again this picture

contrasts with mainstream schooling, in which teachers are expected to be aged between 21 and 65 and to have formal training.

In many systems, mainstream teachers themselves provide supplementary private tutoring. In such countries as Australia, Germany and Singapore, teachers are prohibited from providing paid tutoring to the children for whom they already have responsibility in the mainstream. However, in such countries as India, Lebanon and Nigeria it is common for mainstream teachers to provide remunerated supplementary tutoring for their own mainstream pupils. In some settings this creates a problematic form of blackmail, in which teachers cover only part of the curriculum during school hours and then require pupils to come to the private classes for the remainder of the curriculum. This mainly occurs in countries in which mainstream teachers receive low salaries. The level of salaries on the one hand forces the teachers to seek supplementary incomes, and on the other hand makes society more sympathetic to the practice than it might otherwise be. The fact that teachers in the public system of education provide private tutoring blurs boundaries in classifications. This blurring is especially evident when teachers are permitted to hold private classes on school premises.

High-income societies have additional forms of tutoring that harness technology. Telephone tutoring is one option, but has increasingly been displaced by internet tutoring. Such technology means that the tutors and tutees may be distant from each other and perhaps even in different countries. For example, one company in the USA is named InteractiveMathTutor.com. “No longer is there the discomfort to have a math instructor in your home”, it has declared on its website, “or the inconvenience to travel to a learning center for math tutoring assistance and make a one-hour tutoring session a three-hour debacle”. The company adds: “Whether you live in New York, California or any location around the world, effective, personalized math tutoring help is only a sign up away”. Payments can be made online by credit card to people whom the tutees are unlikely ever to meet in person.

Other dimensions in the supply of tutoring concern the corporatisation of provision. Kumon is among the major international providers, headquartered in Japan and quoted on the Japanese stock exchange. Kumon started in the 1950s as a father-to-son operation, and has grown to 3.7 million clients served by franchised outlets around the world and particularly in Japan, South Korea, the USA, Taiwan, Brazil and Australia (Russell, 1996; Ma, 2005). Other major international franchises include Sylvan, which is headquartered in the USA and has a network in Canada, Hong Kong and the Gulf States (<http://tutoring.sylvanlearning.com>); and Oxford Learning which is headquartered in Canada has a network in the USA, the Gulf States and elsewhere (<http://www.oxfordlearning.com>).

Concerning the content of tutoring, in general the supply is shaped by demand. The subjects in greatest demand are ones required by examination systems at each stage of transition. Mathematics and the national languages tend to be in especially high demand. The demand for elective subjects, such as art and religious studies, is usually more limited. Whereas much tutoring provides “more of the same”, i.e. reinforcement of materials already covered in mainstream classes, other forms of tutoring provide enrichment. Much depends on whether the tutoring is remedial and helping pupils to keep up, or whether it is targeted at high achievers who want to achieve even more.

3. The driving forces

To understand the reasons for the existence of tutoring, it is useful to look at both the consumers and the producers. The consumers include the parents as well as the pupils. Davies (2004, pp.238-239) has pointed out that many families invest in tutoring as part of “intensive parenting”:

That is, the hiring of tutors may be part of a wider strategy in which parents place a great premium on education, value a cognitively stimulating environment for their children, and closely monitor their children’s activities. This style of parenting emphasizes a careful plan of structured activities for children, in which tutoring is part of a series of private lessons that also include music, dance, and sports.

Davies' remarks were made in Canada, but could equally apply to ambitious and elite families throughout the world. Such families are particularly likely to favour individual and small-group tutoring. Their investments in social and human capital can indeed promote learning and generate long-term rates of return. Children who receive such tutoring are likely to perform better in school and to stay in the education system for longer durations.

In sharp contrast are parents in low-income societies who are faced by unavoidable demands on their children by their mainstream teachers. In Cambodia, for example, teachers commonly provide private tutoring for their own students in the same classroom after the close of the official school day (Bray & Bunly, 2005; Dawson, 2009). Teachers may stress that the system is not compulsory; but parents know that if they do not pay, their children will be handicapped not only by failing to secure the curricular knowledge but also probably by incurring the disapproval of the teachers. Moreover, since the teachers control the end-of-year examinations and determine who proceeds from one grade to the next, parents are aware that if they do not pay for tutoring then their children are likely to have to repeat grades. For many parents, the arithmetic becomes simple: it is less expensive to pay for the tutoring than to pay the costs of repeating a year.

Both parents and students are also influenced by peer pressure. Kim (2007, p. 7-8) presented a case study from Korea, highlighting the demands on a mother and her daughter. The mother felt that the pressures on her daughter were very strong, but the mother's view that tutoring was an investment was reinforced by the perspectives of other mothers. Similarly, pupils often choose to enrol in tutoring classes because it appears that all their peers are doing so (Bray, 2009, p. 42-44).

More widely, tutoring is driven by competitive pressures in an increasingly globalised world. Many governments pay strong heed to rankings in cross-national assessments such as those of:

- the Programme for International Student Assessment (PISA) of the Organisation for Economic Co-operation and Development (OECD),

- the Trends in International Mathematics and Science Study (TIMSS) of the International Association for the Evaluation of Educational Achievement (IEA), and

- the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ).

Some governments in turn promote competition through public ranking of achievement by schools; and schools promote competition through public ranking of achievement by pupils. Governments see education as an instrument for competitiveness in international markets, and this view gets translated into pressure on young people to achieve grades by all means including private tutoring.

4. Implications

Private tutoring has obvious implications for social inequalities. High-income families can afford greater quantities and better qualities of tutoring than middle-income and low-income families. At the same time, middle-income and low-income families may find themselves forced to invest in tutoring simply in order to keep up with their peers.

One underlying force arises from government responses to the international rankings of PISA, TIMSS etc. , which may lead the governments to feel that pupils need extra support through a variety of means including tutoring. In the USA, the No Child Left Behind (NCLB) legislation was introduced in 2002 for a number of reasons which included concern about international competitiveness. The NCLB machinery has permitted government resources to be used to pay private tutors (Vergari, 2007; Burch, 2009), thereby again blurring public-private boundaries. It is true that Finland, which is among the highest-ranked countries in PISA surveys, does not have strong traditions of tutoring; but that has not dissuaded at least some other European governments from encouraging the phenomenon. For example, the French government has encouraged families to invest in tutoring by permitting 50 per cent of household payments to private companies to be deducted from liability for income tax (Cavet, 2006, p. 12).

Private tutoring also has other implications for social development. On the one hand, it can be taken as a mechanism for increasing the stock of human capital; but on the other hand, it increases pressures on young people who may find that they have little space for play and other needs. Tutoring also exacerbates geographic inequalities insofar as it tends to be more strongly demanded and more easily available in urban than in rural areas; and in some societies more tutoring is received by boys than by girls (see e.g. Buchmann, 2002).

In addition, out-of-school tutoring may have implications for in-school processes. Among the most problematic aspects are cases in which private tutoring becomes a substitute for the mainstream. Especially near the time of major external examinations, schools in some countries may be perceived by pupils to be less able to cater for their specific needs because they have to serve a wide spectrum of demands and also have broader social and political goals. In Turkey, this has reached the extreme of pupils paying to secure medical notes to allow them to be absent from school. Especially during the semester when pupils take secondary and tertiary education entrance exams, they concentrate on attending the private tutorial centres and on their preparations at home rather than attending mainstream classes. Tansel and Bircan (2007, p. 8) reported that at this season “most students receive false medical reports of sickness which enable them to be absent from their mainstream classes” and that this “has become a widely accepted and expensive process”.

The intensity of private tutoring may also of course affect pupils’ concentration spans. In Korea, Kim (2007, p. 16-17) reported on the effect of tutoring for the entrance to special purpose high schools (SPHs). The tutorial centres are widely perceived by the pupils as offering training that is more relevant. Since the demands of the tutorial centres are heavy, students commonly sleep during school time. The pupils themselves recognize this (Kim, 2007, p. 17):

School teachers do not like SPH applicants. They do not concentrate on class and sleep instead. Grades of the second semester of third grade are not counted by SPH. So the teachers do not like them because those students mess up matters during class....

SPH applicants are all high achieved. They do not study hard in class. It makes mess in class.... Actually many of them sleep during class or do private institute homework or study other things in need.... In English class, most of them [SPH applicants] are sleeping. We already learned the content. And teachers know it.

The above quotations raise issues not only about concentration spans but also about diversity within mainstream classrooms. When tutoring assists low achievers, it usually reduces the diversity and in this respect assists the mainstream teacher. However, much market-driven tutoring serves high achievers. As explained with reference to Mauritius (Bah-lalya, 2006, p. 75):

“When some pupils [receive] private tutoring but others do not, mainstream teachers may face great[er] disparities than would otherwise be the case. While supplementary tutoring can enhance learning of regular lessons, it can detract from learning and teaching during the normal school hours.”

Among the challenges may be that the pedagogy of private tutors differs from that of mainstream teachers. In mathematics, for example, pupils may learn in tutoring centres to solve problems mechanically, rather than through understanding the mathematical principles concerned. In the USA, the NCLB scheme has been criticized for its lack of requirement to coordinate supplementary services with the classroom curriculum. Critics add that providers have not been required to communicate with classroom teachers, with the result that the tutoring services “weaken the organizational capacity of schools to develop a coherent instructional program” (Sunderman, 2006, p. 118).

5. Conclusions

Private supplementary tutoring is not per se a new phenomenon. In various cultures, tutoring has a long tradition, especially in elite families. However, the expanded scale of tutoring, at all levels of education systems and for a much wider range of social classes, dates from recent decades. Significant growth and

spread has been evident even in the period since the turn of the 21st century. During the latter decades of the 20th century, the phenomenon was chiefly evident in East Asia, in South Asia and the countries of the former USSR. More recently, private supplementary tutoring has become increasingly evident in Africa, the Caribbean, North America and Western Europe. It has thus become a global phenomenon, albeit with different manifestations in lower-income countries such as Bangladesh and Cambodia compared with higher-income countries such as France and Japan.

Further, while some parts of the private tutoring industry are very localised, others are globalised. The global manifestations take two forms in particular. First the large multinational corporations such as Kumon, Sylvan and Oxford Learning which operate through franchises; and second are the forms of tutoring that take place across national boundaries via the internet. The latter, in particular, may be considered a phenomenon of the 21st century. Both forms show strong potential for growth in the years to come.

Some aspects of tutoring may be considered positive. Tutoring provides incomes for tutors, and can create constructive out-of-school activities for young people. However, tutoring may also distort parts of the mainstream system, place an economic burden on households, and create excessive pressure for children and adolescents. Thus, a strong case can be made at least for monitoring the spread and nature of tutoring, and in some cases for limiting, regulating and channelling it.

The tutoring phenomenon is also a fascinating and instructive focus for comparative study of education. It is instructive to note not only the patterns of change but also the variations in different cultures, locations, socio-economic groups, and levels of education. Analysis requires care in classification of models, and shows blurring of traditional categories as new forms of education emerge and develop. As such, researchers should be encouraged to look closely at the phenomenon both across and within national boundaries.

Note: Parts of this paper are reproduced from Bray (2006) and Bray (2009). Those publications elaborate on the remarks presented here.

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