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The shadow education system: private tutoring and its implications for planners

Mark Bray

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The shadow education system: private tutoring and its implications for planners

Mark Bray

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Fundamentals of educational planning

The booklets in this series are written primarily for two types of clientele: those engaged in educational planning and administration, in developing as well as developed countries; and others, less specialized, such as senior government officials and policy-makers who seek a more general understanding of educational planning and of how it is related to overall national development. They are intended to be of use either for private study or in formal training programmes.

Since this series was launched in 1967 practices and concepts of educational planning have undergone substantial change. Many of the assumptions which underlay earlier attempts to rationalise the process of educational development have been criticised or abandoned. Even if rigid mandatory centralized planning has now clearly proven to be inappropriate, this does not mean that all forms of planning have been dispensed with. On the contrary, the need for collecting data, evaluating the efficiency of existing programmes, undertaking a wide range of studies, exploring the future and fostering broad debate on these bases to guide educational policy and decision-making has become even more acute than before.

The scope of educational planning has been broadened. In addition to the formal system of education, it is now applied to all other important educational efforts in non-formal settings. Attention to the growth and expansion of education systems is being complemented and sometimes even replaced by a growing concern for the quality of the entire educational process and for the control of its results. Finally, planners and administrators have become more and more aware of the importance of implementation strategies and of the role of different regulatory mechanisms in this respect: the choice of financing methods, the examination and certification procedures or various other regulation and incentive structures. The concern of planners is

twofold: to reach a better understanding of the validity of education in its own empirically observed specific dimensions and to help in defining appropriate strategies for change.

The purpose of these booklets includes monitoring the evolution and change in educational policies and their effect upon educational planning requirements; highlighting current issues of educational planning and analysing them in the context of their historical and societal setting; and disseminating methodologies of planning which can be applied in the context of both the developed and the developing countries.

In order to help the Institute identify the real up-to-date issues in educational planning and policy-making in different parts of the world, an Editorial Board has been appointed, composed of two general editors and associate editors from different regions, all professionals of high repute in their own field. At the first meeting of this new Editorial Board in January 1990, its members identified key topics to be covered in the coming issues under the following headings:

1. Education and development.
2. Equity considerations.
3. Quality of education.
4. Structure, administration and management of education.
5. Curriculum.
6. Cost and financing of education.
7. Planning techniques and approaches.
8. Information systems, monitoring and evaluation.

Each heading is covered by one or two associate editors.

The series has been carefully planned but no attempt has been made to avoid differences or even contradictions in the views expressed by the authors. The Institute itself does not wish to impose any official doctrine. Thus, while the views are the responsibility of the authors and may not always be shared by UNESCO or the IIEP, they warrant attention in the international forum of ideas. Indeed, one of the purposes of this series is to reflect a diversity of experience

and opinions by giving different authors from a wide range of backgrounds and disciplines the opportunity of expressing their views on changing theories and practices in educational planning.

Private tutoring is a phenomenon that has escaped the attention of researchers, educational planners, and decision-makers. Very little is known about its scope, scale, and effects on pupil's achievement and equality of opportunities. Because of its size in a number of countries, and due to its nature – that of a private service oriented at improving academic performance – private tutoring has important implications for the educational system as a whole that cannot be ignored by education policies.

Mark Bray makes an important contribution to the debate through his systematization of available information and his analysis of this phenomenon. He asks the critical questions: “What is private tutoring and what are its manifestations?” “Who supplies and demands this service?” “What effects does it have on the formal education system?” and “What are the policy options facing education planners?”

The Editorial Board is very grateful to Mark Bray for his valuable insight and contribution.

Jacques Hallak
Assistant Director-General, UNESCO
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Preface

Private tuition is not a new phenomenon: it has been practised for quite a number of years in developed and in developing countries alike. In fact, private tuition has become part of the educational environment to such an extent that nobody really questions its existence. The scale of these activities varies a great deal from country to country, but it is often underestimated. In some countries additional private courses, whether provided on an individual basis or in special institutions, have become a huge business, mobilising extensive resources and employing many people. Mark Bray reports that in the Republic of Korea, admittedly somewhat an extreme case, parents spend on private tuition 150 per cent of the sum that the government invests in education.

Planners and decision-makers need to be fully informed of this phenomenon and reflect upon whether it is a good or a bad thing. It may be considered a good thing in that it provides additional resources to numerous (often underpaid) teachers and to university students. Parents are ready to invest large sums in these courses so as to give their children the best preparation for and facilitate access to a higher level of studies and to the best schools. Whether it works, and how it affects quality and equity in the educational system is something that needs to be considered. Not enough evidence is available on the impact of such courses on educational achievements, but they most probably help students to pass the examination; otherwise, their parents would not continue paying large sums of money for them. Training pupils for examination only may not be the best training that can take place. Cramming is often to the detriment of creative learning and may not lead to the expected increase in human capital. Besides, not everybody can pay for such courses: extensive private tuition is then exacerbating social inequalities. Some people also argue that such courses have a negative impact on the mainstream educational system. In some instances, private tuition organized by class teachers can

become a kind of blackmail, if the teachers only teach the most important topics in the private sessions.

What are the policy options available? Ideally, more resources should be allocated to education in general; if teachers' salaries could be increased it would reduce their search for a complementary income; if the money invested in these private courses could be invested in the mainstream educational system, it would be to the benefit of all. However, it is not sure that it would stop the development of such courses, as long as examinations remain as selective as they are. Also, many governments cannot significantly increase the resources allocated to education.

In the present increasingly knowledge-based and globalized societies, where countries and firms compete on the basis of the quality of their workforce, higher and higher levels of education are necessary in order to be considered for a full-time job. Having finished secondary education or having a higher-education degree is not a guarantee against unemployment, but it is the best investment a family can make to prepare its children for the future. In many countries, having a diploma is not enough, and what may become determinant in the recruitment process is the school from which one graduates. All these developments in the labour market contribute to fuelling demand for private tuition as a complement to the courses in formal education. At the same time, governments are pressed to reduce taxes and public spending. Even in countries where total educational expenditures are increasing, the amount of public money spent on each pupil and student tends to decrease: this has led to and may continue to lead to the deterioration of the quality of education offered in state schools. Families are asked to complement financially government funding; and those who can afford it pay for additional courses to make up for the loss in quality. The development of private tuition has to be interpreted within an overall trend, that of a gradual privatization and marketization of education.

These are some of the issues that the present booklet, which has been prepared by Mark Bray, Director of the Comparative Education Research Centre and a professor in the Department of Education at

the University of Hong Kong, touches upon. Drawing on existing research conducted in different parts of the world, but primarily in Asia, where private tuition is particularly widespread, he analyzes the extent of the phenomenon and the various factors that explain its existence, as well as the impact it may have at different levels. The author discusses the various policy options, leaving it to the reader to choose which is the most adapted to each country's context and political philosophy.

The author, Mark Bray, is a very keen observer and analyst of the state of educational systems in numerous Asian and African countries. He was the best placed to write such a booklet. The Editorial Board is very grateful to him for having accepted to write on such a complex subject.

Françoise Caillods
General Editor

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Many people have contributed to this booklet, supplying information and commenting on drafts. They cannot all be mentioned by name, but some deserve explicit acknowledgement. At the IIEP, a key role was played by Françoise Caillods, who encouraged me to write the booklet, commented on the draft and steered it through the production process. Her colleagues on the editorial board also gave constructive suggestions and other assistance. Particularly to be mentioned are Neville Postlethwaite, Kenneth Ross, Richard Sack and Rosa Maria Torres. Other individuals who commented on the draft include Bob Adamson, Patricia Broadfoot, William Cummings, Michael Crossley, W.A. de Silva, Ora Kwo, Percy Kwok, Raffick Foondun, Paul Morris, Vanilda Paiva, Nancy Russell, Sheldon Shaeffer, Jason Tan, and Mercy Tembon.

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Introduction

For millions of children throughout the world, formal instruction does not end when the school bell rings to signal the completion of the school day. Many children proceed from their schools, with or without a break, to some form of private supplementary tutoring. Some do not even leave their school compounds. Instead, they receive private supplementary tutoring within the same institution and perhaps even in the same classroom and from the same teachers. Many children also receive tutoring on non-school days, i.e. at weekends, during vacations and on public holidays.

During recent decades, private tutoring has grown to become a vast enterprise. It employs many thousands of people, consumes massive amounts of money, and demands huge amounts of time from both tutors and students. However, few planners and policy-makers have adequate data on private supplementary tutoring and, in general, the implications of tutoring for education systems and for social change are underestimated and poorly understood.

The title of this booklet, following a terminology used in several countries, describes private supplementary tutoring as a 'shadow' education system. The metaphor of a shadow is appropriate in several ways. First, private supplementary tutoring only exists because the mainstream education 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 public 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.

Shadows can of course be useful. Just as the shadow cast by a sun-dial can tell the observer about the passage of time, so the shadow of an education system can tell the observer about change in societies. However, in some countries, parents, educators and politicians are highly critical of the way in which private tutoring has come to

dominate the lives of families and pupils. Tutoring commonly creates and perpetuates social inequalities, and it consumes human and financial resources which perhaps could be used more appropriately in other activities. Critics add that private tutoring can distort the curriculum in the mainstream system, upsetting the sequence of learning planned by mainstream teachers and exacerbating diversity in classrooms. In this sense, unlike most shadows, private supplementary tutoring is not just a passive entity but may negatively affect even the body which it imitates.

More positively, private tutoring can be seen as a mechanism through which pupils extend their learning and gain additional human capital, which benefits not only themselves but also the wider societies of which they are part. Tutoring may also reduce the workload of mainstream teachers, helping pupils to understand the materials which have been, or will be, presented during the ordinary school day. For planners, moreover, the sun-dial of private tutoring indicates not only what some segments of society want, but also what they are prepared to pay for.

Despite the widespread existence and far-reaching implications of private tutoring, it has so far received little attention by researchers and planners. This is partly because the mainstream education system is much easier to observe and monitor. Most information on budgets and educational processes in government-controlled schools is either already public knowledge or available to be demanded as public knowledge. The same is true of many private schools, for education authorities commonly insist that such schools report data at least on enrolments, class size, curriculum and pupil achievement. By contrast, private supplementary tutoring is beyond the reach of most government data-collection systems. Tutors are often unwilling to declare their earnings, and families may be reluctant to declare their expenditures. Processes of teaching and learning may also be unmonitored. Many government officials prefer not to investigate private supplementary tutoring because it is a complex area for which they might be pressed to take some responsibility; and researchers lack the authority to demand information on activities which take place behind closed doors.

Nevertheless, some information is available on the topic, and a central argument of this booklet is that private supplementary tutoring deserves much greater attention than it has so far received. The booklet pulls together scattered data from a variety of sources to present one of the most comprehensive international pictures that has yet been assembled. It also demonstrates the need for more research. Much can be learned from cross-national comparisons regarding the nature of private supplementary tutoring and about appropriate responses from planners and policy-makers.

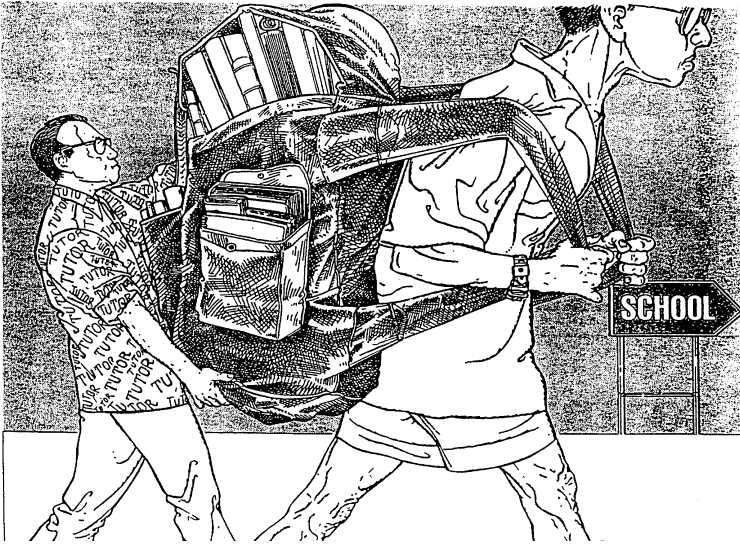
I. Definitions and parameters

Some definitions are needed to help identify the nature of the topic. First is the matter of *supplementation*. The booklet is only concerned with tutoring which covers subjects which are already covered in school. It does not, for example, examine language classes for minority children whose families are anxious that new generations retain competence in languages not taught in mainstream schools.

Second is the dimension of *privateness*. The booklet is not concerned with personnel who provide supplementary help at public expense, e.g. to assist new immigrants to adjust to host societies, or to provide head-start or other programmes for slow learners. Nor is the booklet concerned with unpaid work, e.g. from family members who voluntarily help other family members with their homework or other tasks. Rather, the booklet is primarily concerned with tutoring provided by private entrepreneurs and individuals for profit-making purposes.

The basic focus of the booklet is on *academic* subjects taught in mainstream schools, particularly languages, mathematics and other examinable subjects. Tutors are commonly perceived as people who help pupils to carry the heavy academic load of formal classrooms (*Box 1*). Discussion in the booklet does not include musical, artistic or sporting skills, which are learned primarily for pleasure and/or for a more rounded form of personal development. These may also consume substantial financial and human resources, and may have a significant impact on social stratification as well as on general social welfare. However, the issues associated with non-academic subjects are somewhat different, particularly insofar as they are not assessed by examinations and explicitly used in the gate-keeping process of transition from one part of an education system to another, and they deserve separate study in their own right.

**Box 1. The role of the private tutor –
a Singaporean perspective**



Source: *Straits Times*, 4 April 1992, p.28.

In terms of *levels*, the booklet is mainly concerned with the subjects learned in primary and secondary schools. Supplementary tutoring certainly exists at the post-secondary and even pre-primary levels. It is less vigorous at these levels, however, and the mechanics and issues are rather different. In the majority of societies, supplementary tutoring is most evident at the senior secondary level, followed in order of magnitude by junior secondary and upper primary.

The *forms* of private tutoring may be varied. Some tutoring is provided one-to-one in the home of either the tutor or his/her client. Other tutoring is in small groups, in large classes, or even in huge lecture-theatres with video-screens to cater for overflows. Some tutoring is provided entirely by correspondence in the mail or over

the Internet; and in some societies tutoring is provided by telephone. The fact that private tutoring can be provided in so many forms is among the reasons why it is difficult to investigate. However, the variety of forms also provides instructive comparisons and contrasts.

Finally, the *terminology* used to identify private tutoring varies in different countries. In some English-speaking societies, people refer to private tuition more often than to private tutoring. Entrepreneurs who create formal establishments for tutoring commonly call them centres, academies or institutes. In Japan, tutoring centres which supplement the school system are known as *juku*. These are distinguished from *yobiko*, which mainly serve pupils who have left school but who want an extra 'block' of time to study intensively for examinations in order to gain higher grades for entrance to universities. A parallel phenomenon exists in the United Kingdom, where such institutions are called *crammers*. While *yobiko* and *crammers* are mainly outside the scope of this study since they primarily serve pupils who have left school, some *yobiko* and *crammers* give supplementary tutoring to pupils who still attend school. To this extent, categories overlap.

II. Characteristics of private tutoring

Scale

The scale of supplementary tutoring varies widely in different societies. Major factors underlying the variation include cultures, the nature of mainstream education systems, and the structures of economies.

Table 1 provides some statistics as a starting point. The statistics are not all of equal reliability, and comparison is obstructed by the fact that they have been collected in different ways, apply to different levels of education, and refer to different points in time. Nevertheless, the statistics help to sketch a picture. The table shows that in some countries tutoring is a very large enterprise. In Mauritius, for example, almost all senior secondary school students receive tutoring; in Japan about 70 per cent of pupils will have received private tutoring by the time they complete middle school; and in Malaysia about 83 per cent of pupils will have received tutoring by the time they reach senior secondary school.

The scale of tutoring appears to have increased during the last few decades. *Figure 1* shows statistics for Japan, where attendance at elementary-level *juku* is reported to have doubled between 1976 and 1993. Many tutorial centres in Japan are modest in size, but others are huge. The largest, Kumon Educational Institute, trains housewives to teach its mathematics, English and Japanese-language curriculum to children, and has become a multinational corporation operating in 27 countries. Nine *juku* firms are listed on Japanese stock exchanges (Russell, 1997, p.154). The growth of tutoring has led to an overall increase in activity even though the falling birth rate has reduced the total number of children in Japan.

*The shadow education system:
private tutoring and its implications for planners*

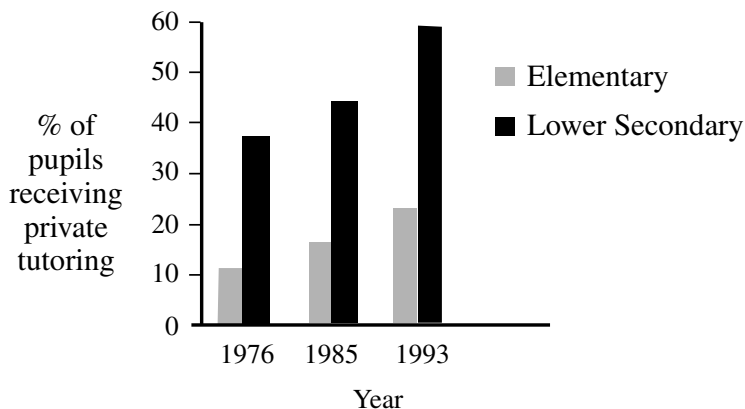
Table 1. The scale of private supplementary tutoring in selected countries

Country	Scale of private supplementary tutoring	Sources
Brazil	A study in Rio de Janeiro public schools found that over 50% of students received tutoring and saw it as a way to reduce the likelihood of having to repeat grades.	Paiva et al., 1997
Cambodia	Respondents in 31% of 77 primary schools surveyed in 1997/98 indicated that pupils received tutoring. Among urban schools, the proportion was 60%. At post-primary levels, proportions were higher still.	Bray, 1996a; 1999
Egypt	In 1991/92, 54% of 9,000 Grade 5 pupils (300 schools) and 74% of 9,000 Grade 8 pupils (another 300 schools) were receiving private tutoring. A 1994 survey of 4,729 households found that 65% of urban primary children and 53% of rural ones had received tutoring.	Fergany, 1994; Hua, 1996
Guinea	A 1995/96 survey of Grade 6 pupils in two urban and four rural schools found 19% receiving private tutoring.	Tembon et al., 1997
Hong Kong	A 1996 survey of 507 students found 45% of primary, 26% of lower secondary, 34% of middle secondary, and 41% of upper secondary students receiving tutoring. A 1998 study of four schools serving different population groups found an average of 41% of Grade 3 and 39% of Grade 6 pupils receiving tutoring.	Lee, 1996; Liu, 1998
Japan	A 1993 survey found 24% of elementary pupils and 60% of secondary pupils attending <i>juku</i> . Another 4% received tutoring at home. Nearly 70% of all students had received tutoring by the time they had completed middle school.	Japan, 1995; Russell, 1997
Korea, Republic of	A 1997 survey indicated that in Seoul, 82% of elementary, 66% of middle and 59% of academic high school students received tutoring. In rural areas, proportions were 54%, 46% and 12%.	Paik, 1998; see also Yoon et al., 1997
Malaysia	In 1990, 8,420 students were surveyed in secondary Forms 3, 5 and 6. Respective proportions receiving tutoring were 59%, 53% and 31%. About 83% of students had received some form of tutoring by the time they reached upper secondary level.	Marimuthu et al., 1991
Malta	A 1987/88 survey of 2,129 pupils found that 52%	Falzon;

Characteristics of private tutoring

	of primary and 83% of secondary students had received tutoring at some time during their careers. In that year, 42% of Grade 6 and 77% of Grade 11 pupils were receiving tutoring.	Busuttil, 1988
Mauritius	A 1991 survey showed 56% of students receiving tutoring in secondary Form 2. Proportions rose to 98% in Forms 3 and 4, and 100% in Forms 5 and 6. A 1995 survey of 2,919 Grade 6 pupils reported that 78% received extra lessons.	Foondun, 1998; Kulpoo, 1998
Morocco	A 1993 survey of 1,953 mainstream secondary science teachers indicated that 53% provided after-school tutoring. The lowest proportion (27%) was in the first year of secondary education; but the figure rose to 78% in the most senior grade.	Caillods et al., 1998
Myanmar	A 1991 survey of 118 Grade 9 and 10 students in Yangon Division found 91% receiving tutoring. Among 131 students in Grades 5-8, 66% received tutoring.	Gibson, 1992
Singapore	A 1992 survey of 1,052 households plus interviews with 1,261 students found 49% of primary pupils and 30% of secondary pupils receiving tutoring. Findings matched an earlier study of tutoring in languages among 572 primary and 581 secondary students.	Kwan-Terry, 1991; George, 1992; Wong; Wong, 1998
Sri Lanka	In 1990, 1,873 students were surveyed in Years 6, 11 and 13. Proportions receiving tutoring in Years 6 and 11 were 80% and 75%. In Year 13 the proportions were 62% for arts students, 67% for commerce students, and 92% for science students.	de Silva et al., 1991; de Silva, 1994a
Taiwan	Government statistics indicate that in 1996 Taiwan had 4,266 tutoring centres with 1,505,491 students. Other centres are unregistered and are illegal. A 1998 survey found 81% of 397 senior secondary students receiving private tutoring.	Taiwan, 1997; Tseng, 1998
Tanzania	A 1995/96 survey of Grade 6 pupils in three urban and four rural schools in mainland Tanzania found 26% receiving tutoring. In a Dar es Salaam school, 70% of Grade 6 pupils received tutoring in 1998. A 1995 survey of 2,286 Grade 6 Zanzibar pupils found 44% receiving extra lessons, though not all pupils paid for the classes.	Peasgood et al., 1997; Nassor; Mohammed, 1998
Zimbabwe	A 1995 survey of 2,697 Grade 6 pupils in all nine regions reported that 61% received extra lessons. The regional range of proportions was from 36% to 74%.	Machingaidze et al., 1998

Figure 1. Increasing attendance of pupils in *juku*, Japan, 1976-93



Source: Japan (1995), p.6.

Statistics also show growth of tutoring in other countries. A pair of surveys in Singapore suggested that the proportion of primary pupils receiving tutoring increased from 27 per cent to 49 per cent between 1982 and 1992, and that the increase at the secondary level was from 16 per cent to 30 per cent (George, 1992). In Mauritius, a pair of surveys showed an increase at Grade 6 from 73 per cent in 1986 (Joynathsing et al., 1988, p.31) to 78 per cent in 1995 (Kulpoo, 1998, p.26).

During the 1990s the shift towards a market economy in China and Viet Nam permitted and encouraged the emergence of supplementary tutoring in settings where previously it did not exist. Eastern Europe has also undergone economic transition. The partial collapse of public education systems during the 1990s which accompanied that transition and which followed the collapse of communism in 1991 has required families to invest in tutoring on a scale not previously evident (UNICEF, 1998, p.85).

Cost

Such tutoring consumes huge amounts of money. For example:

- In Japan, tutoring had annual revenues in the mid-1990s equivalent to US\$14,000 million (Russell, 1997, p.153).
- In Singapore (which has a population of only 3 million compared with 125 million in Japan), households were reported in 1992 to be spending about US\$200 million on private tutoring (George, 1992, p.29).
- A Myanmar study (Gibson, 1992, p.4) estimated that mainstream high schools in the capital city consumed 16 per cent of the incomes of the students' families, and that tutoring raised this figure to 27 per cent.
- In Egypt, private tutoring was estimated in 1994 to consume 20 per cent of total household expenditures per child in urban primary schools and 15 per cent in rural primary schools (Fergany, 1994, p.79).
- In Cambodia, even at the primary level, supplementary tutoring has been estimated to consume 7 per cent of the total cost of schooling (Bray, 1999, p.42); and the costs of tutoring escalate substantially at the secondary level (Asian Development Bank, 1996, p.107).
- Most dramatic of all, parents in the Republic of Korea are reported to have spent US\$25,000 million on private tutoring during 1996, which was equivalent to 150 per cent of the government's budget (*Asiaweek*, 1997, p.20). Typical households spent the equivalent of US\$1,950 a year on tutoring for each child in secondary school, and US\$1,500 for each child in primary school.

In most cases, the greatest components in these figures are the fees paid to tutors and their agencies. In most settings, charges increase at higher levels of the education system, and individual tutoring is more costly per person than group work. *Table 2* shows figures from Bangladesh which illustrate this point.

Table 2. Average monthly charges for private tutoring, Dhaka Metropolitan Area, Bangladesh, 1995 (Taka)

	Individual study	Groups of 3-5 persons
Primary level	450	275
Classes 6-8	650	375
Classes 9-10	850	550
Intermediate level	950	700
Higher level	1,350	650

Source: Bangladesh Bureau of Statistics, cited in Ilon (1998), p.31.

In addition to fees, students must pay for books, stationery, and travel. Increasingly, students also have to purchase computers and associated equipment. The Japanese Government has estimated that in 1996, 72 per cent of the household expenditures on supplementary learning by upper secondary school students was consumed by fees for tutors and *juku*, while the remainder was consumed by stationery, books and other items (Japan, 1998, p.163). At the lower secondary level, 85 per cent of expenditures was allocated to fees, with 15 per cent being consumed by materials and other items.

Private tutoring also has a substantial opportunity cost, not only for tutors but also for students. The opportunity cost arises from the time spent in lessons and from the time for preparation, administration and travel. One study in Malaysia (Marimuthu et al., 1991, p.61) found that although 70 per cent of students receiving tutoring spent less than three hours a week in travel to and from tutors, 17 per cent spent more than six hours a week.

The corollary of the figures on direct expenditures is that tutoring gave substantial incomes to large numbers of tutors. Some of them already had other sources of income, e.g. as teachers in mainstream schools, but others had no alternative sources of income. Because tutoring is mostly a shadow activity, much of the revenue received by tutors is beyond the reach of government tax collectors.

Geographic spread

These examples show that supplementary tutoring is found in many parts of the world, and especially in Asia, Africa, Eastern Europe and Latin America. The principal regions in which tutoring is not quite as prominent (though still evident) are Western Europe, North America, and Australasia.

Among the determinants of the scale of tutoring, and thus its geographic spread, the most important are cultural, educational and economic factors. Many Asian cultures, particularly those influenced by Confucian traditions, place strong emphasis on effort as a factor explaining and determining success (Rohlen; LeTendre, 1996, p.374; Salili, 1996, p.92). In contrast, European and North-American cultures are more likely to emphasize ability. Supplementary tutoring is especially likely to be widespread in cultures which stress effort.

Also important are the size and nature of education systems. Supplementary tutoring is more common at the secondary than at the primary level, and as African countries expand their secondary provision they 'catch up' with Asian and Latin-American countries not only in formal schooling but also in supplementary tutoring. Private tutoring is also more evident in systems in which success in examinations can easily be promoted by investment in private supplementary tutoring; and private supplementary tutoring becomes more necessary in systems which are teacher-centred rather than child-centred, and which are intolerant of slow learners.

A further crucial factor concerns the economic rewards from private tutoring. With reference to Singapore, Kwan-Terry (1991, p.71) highlighted research which showed that in the mid-1980s the average earnings of males with no schooling were S\$583 per month, rising to S\$665 for males with primary education, S\$861 for those with secondary education, S\$1,260 for those with post-secondary education, and reaching S\$3,000 for males with tertiary education. Since the gateway to each level was guarded by examinations, the rewards for success and the penalties for failure in those examinations were substantial. Psacharopoulos (1994) has summarized other studies of rates of return which, in general, show that individuals

would be well advised to stay in education systems as long as they can. If supplementary tutoring helps people to stay in education systems longer, then for those people it may be a very good investment. However, in some societies the differentials in living standards between individuals with different amounts of education are greater than in others. Differentials have long been particularly great in such societies as Singapore and Hong Kong, but less marked in such countries as the United Kingdom and Australia. This implies that the rewards from extra levels of schooling, and from supplementary tutoring, are greater in these Asian societies than in Western Europe or Australasia.

Also evident from these examples is that supplementary tutoring may be found in both rich and poor countries. *Table 1* shows high proportions both in the Republic of Korea, which had a per capita Gross National Product (GNP) in 1994 of US\$8,260, and in Cambodia, which had a per capita GNP of US\$238. Likewise, it shows high proportions both in Mauritius (per capita GNP US\$3,150) and Sri Lanka (US\$640). Within those societies, the relatively prosperous are more easily able to pay for tutoring than the relatively poor; but even among the poor, participation rates are high. In countries suffering from economic collapse, tutoring may be widespread because teachers are paid such low salaries that they have to secure extra income simply in order to live.

Private tutoring is more common in urban than in rural areas. The Cambodian study mentioned in *Table 1* referred to private supplementary tutoring given in the pupils' regular public primary schools. Among the urban schools in the sample, 61 per cent reported that their children received private supplementary tutoring, whereas the proportion among rural schools was just 9 per cent (Bray, 1999, p.58). Urban bias has also been reported in other countries. With regard to Malaysia, for example, research reported by Chew and Leong (1995) recorded 59 per cent of students in urban schools receiving tutoring compared with 28 per cent in rural schools. Chew and Leong observed (p.21) that:

The higher demand for tuition on the part of students in urban areas may be due to a number of reasons. For one, there is normally a higher level of competitiveness among urban students which is related to the very competitive nature of urban life. Secondly, parents in urban society usually possess higher educational attainment than their rural counterparts and, by logical extension, have higher achievement expectation regarding their children's education... Also, urban parents are better off in socio-economic terms to afford tuition for their children, given that the fees incurred are fairly substantial.

Similar remarks have been made with reference to Greece (Polydorides, 1986), Egypt (Fergany, 1994) and Taiwan (Tseng, 1998).

Intensity

Of course not all students, even within particular locations, receive tutoring for the same duration each day or week. As already indicated, students receive tutoring more intensively at the secondary rather than the primary level; and within those levels they demand more tutoring in the grades which lead up to major examinations.

Table 3 provides data on this topic from Sri Lanka. According to the study from which these figures were drawn, the duration of tutoring received by science specialists in Year 13 was almost three times that received by arts specialists and nearly twice that received by commerce specialists. Presumably, the intensity of tutoring also varied according to the time of year. In parallel Malaysian research (Marimuthu et al., 1991, p.47), 70 per cent of students sampled who were receiving tutoring did so throughout the year, while the others only received tutoring prior to important examinations. Students may attend several tutors for different subjects or even for different components of the same subject. Wijetunge (1994, p.15) has remarked with reference to Sri Lanka that students preparing for the Advanced Level examinations commonly “feel compelled to seek

out the ‘experts’ for various sections or topics within a single subject, to the extent that even four or more tutors per subject no longer raises eyebrows”.

Table 3. Average number of hours spent on private tutoring, by grade and specialism, Sri Lanka

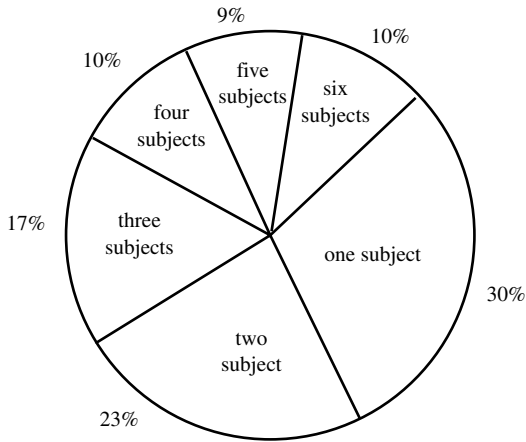
Grade	Total no. of students receiving tutoring	Total no. of hours spent on tutoring per week	Average no. of hours spent on tutoring per week
Year 11	568	4,892	8.6
Year 13 Arts	376	1,608	4.3
Year 13 Commerce	262	1,607	6.1
Year 13 Science	278	3,199	11.5

Source: de Silva (1994a), p.28.

An alternative indicator of intensity is the number of subjects in which students receive tutoring. *Figure 2* shows the number of subjects taken by 4,340 primary and secondary students in Malaysia. Over half the students received tutoring in only one or two subjects, but nearly 20 per cent received tutoring in five or more subjects.

The intensity of private tutoring may also vary because of other factors. As one might expect, children in higher socio-economic groups generally receive more supplementary tutoring than do children in lower socio-economic groups (de Silva, 1994a; Foondun, 1998; Stevenson; Baker, 1992). Some societies also exhibit variations by race. *Table 4* elaborates on the Malaysian data by showing a racial breakdown. A higher percentage of Indian students received supplementary tutoring than did Malays, with Chinese students occupying an intermediate position.

Figure 2. Number of subjects in which students received tutoring, Malaysia (%)



Source: Chew; Leong (1995), p.28.

Table 4. Distribution of students receiving supplementary tutoring, by race, Malaysia

Race	Receiving tutoring		Not receiving tutoring	
	Number	%	Number	%
Malay	1,471	39	2,265	61
Chinese	2,213	63	1,276	37
Indian	449	71	182	29
Others	236	41	340	59

Source: Chew; Leong (1995), p.23.

Subjects

Because the emphases of mainstream education systems vary, so do the emphases of shadow education systems. In general, the subjects given most attention in private tutoring are the ones most needed for educational and therefore socio-economic advancement. Commonly this means languages, mathematics and science.

Kwan-Terry (1991) has highlighted the importance of languages in Singapore. In that country, English is essential for advancement, but students must also have competence in a mother tongue. Within the Singaporean population, approximately 77 per cent are Chinese, 14 per cent are Malays and 6 per cent are Indians. Kwan-Terry's research found 55 per cent of primary students and 29 per cent of secondary students receiving tutoring in English and/or a second language. Demand for English tutoring was lowest with children from homes where the parents used English (*Table 5*), probably because the parents felt that their children already had adequate exposure. However, these children formed the largest percentage receiving tutoring in the second languages. The reason was that the second languages were essential for advancement, the English-medium homes were generally wealthy, and the children would not have had much out-of-school exposure to second languages in the absence of supplementary tutoring. Many children from non-English-medium homes received classes in English to boost their grades, but the proportion from Malay families was relatively low because those families were generally less prosperous.

Table 6 adds a different dimension by showing Sri Lankan data on the subjects with the largest numbers in supplementary tutoring. The list is dominated by science, which is followed by mathematics and then by languages. Tutoring in English appears to have been less prominent, though was still important to some students. Among science students in Year 13, every student in the sample received tutoring for pure and applied mathematics, but only 84 per cent received it for chemistry and 83 per cent for physics. Mathematics was also the most popular subject among Year 6 students, followed by science.

Table 5. Language background and supplementary tutoring in Singapore

Language spoken between parents	% receiving tutoring for English	% receiving tutoring for 2nd languages
English	14	57
Mandarin	26	5
Tamil	20	4
Malay	19	1
Chinese dialect or Mandarin and dialect	22	8

Source: Kwan-Terry (1991), p.81.

Table 6. Most common subjects for supplementary tutoring, Sri Lanka

Subject	Year and specialism	% of students receiving tutoring
Pure mathematics	13/Science	100
Applied mathematics	13/Science	100
Chemistry	13/Science	84
Physics	13/Science	83
Mathematics	11	74
Mathematics	6	69
Sinhala	11	68
Sinhala	6	8
Accounts	13/Science	67
Science	11	67

Source: de Silva (1994a), p.28.

These figures had parallels in Kuwait and Malta. In the former, a survey of 934 students in Grades 5-12 found that 77 per cent received tutoring in mathematics, 55 per cent in physics, 45 per cent in chemistry, and 12 per cent in biology (Hussein, 1987, p.94). Classes in English attracted only 15 per cent of the sample, and classes in Arabic attracted only 6 per cent. In Malta, 68 per cent of respondents

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to a survey of primary and secondary pupils received tutoring in mathematics compared with 49 per cent in English and 31 per cent in Maltese (Falzon; Busuttil, 1988, p.51).

The research by Tseng (1998, p.96) also showed that mathematics was the most popular subject among senior secondary students in Taiwan. Nearly half the students in her sample were receiving supplementary tutoring in mathematics, while a third received it in English.

III. Producers and consumers

Producers: who provides private tutoring, and how?

For two reasons, presentation of more elaborate profiling of the actors involved in private tutoring begins here with the producers rather than the consumers. The first reason is that in some settings, supply creates demand. In these circumstances, tutoring exists because the producers make it available and recommend pupils to take advantage of the availability, and/or because the consumers find out that the product is available and then decide to make use of it even though they would not have demanded it if the service had not been readily available. The second and allied reason is that the nature of the supply is a major determinant of the types of consumers who are attracted. Tutors who go to private homes and teach on a one-to-one basis serve a different market to those tutors who operate large classes.

For understanding of dynamics, an important distinction is between two types of situations:

- where the tutors are also teachers in the mainstream system, and are receiving additional payment for tutoring pupils who are already their students in the mainstream; and
- where the tutors provide tutoring for students for whom they do not otherwise have any responsibility.

The former situation, which is found in countries as diverse as Cyprus, Indonesia, Lebanon, Nigeria and Russia, is widely considered very problematic. The teachers would justify the practice on the grounds that they are unable to cover the syllabus during official class hours and/or are paid such low salaries for their mainstream duties that they are forced to find ways to supplement their income. Critics of such circumstances point out that assistance to pupils who are really in need should be part of teachers' normal work, for which they should not receive extra pay. Critics add that some teachers deliberately slow down their mainstream work in order to ensure that

syllabuses are not fully covered and that markets therefore exist for their services. Worse, critics point out, an element of blackmail might be involved: teachers might inform their mainstream students, either directly or indirectly, that pupils who do not come to the private lessons will be penalized in class tests and other activities. Teachers may also deliberately fail students in order to create a market for their services. These practices are said to be common in Cambodia, for example (*Box 2*). Teachers in that country have considerable autonomy, including as regards decisions on which students will be required to repeat grades. Parents might consider it cheaper to pay for supplementary tutoring in order to ensure that their children are promoted to the next grade than to find that their children incur the costs and other problems associated with repetition.

Box 2. Same class, same teacher

Time for the end of the school day in Phnom Penh, capital of Cambodia. A senior pupil bangs a pipe against the suspended wheel hub that serves the same purpose as a bell in other countries. But in Samith Pheng's Grade 6 class, most students leave their desks only for a short break. Public schooling has ended, and private schooling has begun.

Many teachers in Cambodia supplement their official salaries by giving supplementary tutoring to their own pupils. Pupils pay a daily fee direct to the teacher for each lesson. "We don't like the system," complains one parent, "but we have no power to change it." Parents know that many teachers deliberately omit coverage of some parts of the curriculum during the normal school day in order to ensure a market for supplementary tutoring. Parents realize that if their children do not take the supplementary classes, they will probably be asked to repeat the grade next year. This would waste the children's time, and would cost as much as paying for the supplementary lessons. Grade 6 is an especially important stage because it is the year of the school-leaving examination.

Because they have no choice, most parents accept these arrangements as a normal feature of life. Moreover, many parents have sympathy for the teachers because they realize that official salaries are too low for the teachers to support their families without extra income. Government officials also have misgivings about the system, but so far have been unable to change it.

Recognizing the dangers of such a situation, some governments forbid mainstream teachers to accept payment for supplementary tutoring of their own students. Singapore, the Republic of Korea and Morocco are countries in which such regulations are enforced. However, mainstream teachers in those countries are still permitted to accept payment for tutoring pupils from other schools.

Tutors who are not already employed as mainstream teachers may vary widely in characteristics. Variation of course exists in the mainstream; but it is much greater in the shadow system. Tutors may be young or old, well qualified or poorly qualified, male or female, full-time or part-time, and employed by an institution or self-employed. University students commonly supplement their incomes by providing tutoring for secondary and perhaps primary school children; and, in some societies, secondary school students earn money by tutoring primary school pupils. According to Harnisch (1994, p.327), approximately one third of teachers in Japanese *juku* are university students. Research in Malaysia reported by Chew and Leong (1995, p.26) indicated that 72 per cent of a sample of tutors whose qualifications were known by their students had university degrees, 18 per cent had college qualifications, 7 per cent had higher school certificate qualifications, and 3 per cent had school certificate qualifications. Urban students were more likely to be taught by graduates than were rural students. In all countries, directors of tutoring schools commonly make a particular effort to recruit retired teachers who are still up to date with their subjects. However, tutors are often considerably younger as well as considerably older than mainstream teachers.

Some tutors offer highly specific skills, e.g. for particular grades of particular subjects and perhaps for particular segments of the curriculum. In Macau, schools are diverse in their curricular approaches, and a tutor who specializes in a branch of modern mathematics for pupils in one school may serve a different market from a neighbouring specialist in a branch of traditional mathematics for pupils in another school. In Central and Eastern Europe, specialist tutors of senior secondary students focus on the specific examinations for entry to individual faculties in individual universities. In Cambodia,

street-side advertisements proclaim the specific parts of the specific books which tutors will teach at particular times. This is a much more specialized service than is typically offered by mainstream schools.

A common conception is that full-time tutors, particularly the 'star' tutors who adopt flashy lifestyles in order to appeal to young clients, can gain much higher incomes than teachers in mainstream schools. This conception has some validity, but incomes are not uniformly high. Although full-time tutors in Japanese *juku* have much more fragile conditions of employment than their counterparts in mainstream schools, they have only slightly higher earnings. In the mid-1990s, the average starting annual salary for new college graduates in large *juku* was the equivalent of US\$24,000, compared with US\$20,000 in Tokyo public high schools (Russell, 1997, p.166). These figures remained comparable after several years' experience, when the average annual wage was the equivalent of US\$52,000 for a 30-year-old *juku* teacher and US\$54,000 for a 32-year-old Tokyo public high school teacher.

Because the tutors have to respond to market needs, they usually make a special effort to find out what students want and then to respond to it. In the words of one Hong Kong tutor: "I care about my performance in the tuition centre because I regard students as customers, not like in the formal school" (cited in Tseng, 1998, p.62). Such comments would be especially typical of tutors who do not have an automatic flow of clients from particular mainstream schools. Tutorial centres in Hong Kong commonly increase their attractiveness by offering the most recent technology, including CD-ROMs and the Internet. Some centres offer prizes for academic success, and expand their markets by advertising through leaflets, posters, newspapers, magazines, cinemas and television. In most settings, however, recommendations operate more effectively than formal advertising. The Malaysian research reported by Chew and Leong (1995, p.24) indicated that 71 per cent of respondents identified their tutors through friends. Fourteen per cent selected tutors in response to advertisements, while 12 per cent followed the recommendations of

their mainstream teachers. Only 7 per cent indicated that the tutors had contacted the students first.

Of course market share and financial gains are not the only motives which lead individuals to provide tutoring. Russell (1996, p.261) pointed out that many of the tutors for Kumon's mathematics materials in Japan are housewives who are motivated by a desire to help others as well as to find a socially-acceptable form of part-time employment. And in Singapore, important help is given by community organizations. One of these is the Council for the Development of the Singapore Muslim Community, better known by its abbreviated Malay name, Mendaki. The main rationale for the creation of this body in 1981 was to help the Malay community catch up with the Chinese and Indians in educational performance. This, it was argued, would promote Malay participation in the economy, and avoid the racial disharmony caused by social imbalances. The government gives Mendaki financial support, and permits the organization to use public schools for after-school tutoring. The government also trains tutors, who work voluntarily or for low fees. Following the Mendaki lead, other ethnic groups established associations during the 1990s. The Singapore Indian Development Association was founded in 1991 and the Chinese Development Assistance Council in 1992. Also in 1992, the Eurasian Association, which had been established in the 1980s, launched an endowment fund to finance education and welfare programmes for the Eurasian community. While most supplementary tutoring in Singapore is offered on commercial terms, these community bodies provide significant help to pupils from low-income groups (Tan, 1995, pp.339-53; Bray, 1996b, pp.12-13).

Finally, some tutors and institutions are of course more popular than others. While some individual tutors need to hunt for clients, the reputation of others ensures long waiting lists. The same applies at the institutional level. At the popular end of the spectrum, Harnisch (1994, p.325) reports on a *juku* in Japan which only accepted 1,868 Grade 4 students out of 11,000 applicants, and held 6,000 applicants on stand-by status. Some *juku* set examinations on which to determine entry; and *juku* even exist to prepare students for the examinations to enter other *juku*!

Consumers: who receives private tutoring, and why?

Turning from the producers to the consumers, some elaboration is needed on the characteristics of students receiving supplementary tutoring. Casual observers sometimes assume that the dominant groups of students receiving tutoring comprise pupils whose academic performance is weak and who therefore need remedial assistance. In fact the opposite is the case: the dominant group is of students whose performance is already good, and who want to maintain their competitive edge. Tseng (1998, p.97) showed that in Hong Kong and Taiwan, proportions of students in high-ranking schools taking tutoring were much greater than proportions in low-ranking schools. A similar observation was made in Germany by Toyama-Bialke (1997). In that country, private tutoring is generally uncommon; but the few students who do receive tutoring are mostly from the elite academic schools.

Even in such a situation, however, students' self-perceptions about their academic standards may be at variance with objective reality. *Table 7* reports responses by Hong Kong students when asked about the single most important reason for taking supplementary tutoring. By far the greatest proportion indicated that it was because their academic performance was not very good. This can be explained by the fact that it is a relative statement, in which respondents compared themselves with the high achievers in their classes rather than with some absolute standard or even with the average for their grades. Also, the perception probably also reflected parental pressures on the students. This sample included students from all grades, and so was less dominated by public examinations than would have been revealed by surveys of upper secondary education.

The Hong Kong data can usefully be placed alongside data from Malta and Sri Lanka. *Figure 3* presents data from Maltese secondary school pupils on the reasons why they received tutoring. Whereas the Hong Kong researchers (*Table 7*) asked pupils to indicate the single most important reason for taking tutoring, thereby deriving proportions which added up to 100 per cent, the Maltese researchers

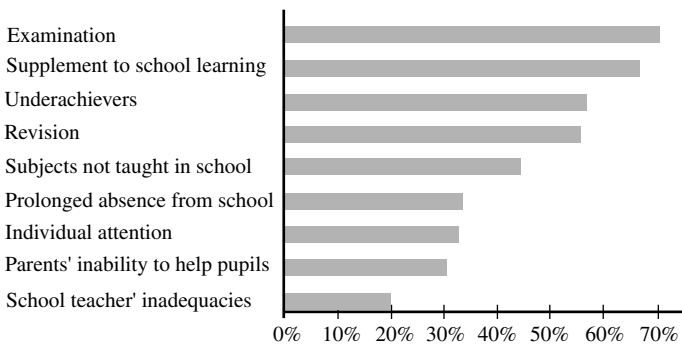
Table 7. Main reasons given by Hong Kong students for taking supplementary tutoring

My academic performance is not very good	71%
I don't understand what the teachers teach in class	14%
To prepare for the public examination	8%
My parents want me to	2%
No one in my family can help me with my homework	1%
Because some of my classmates have private tutoring	1%
Other reasons	2%
Don't know/hard to say	2%

Source: Lee (1996), p.15.

permitted multiple answers and reported the proportions out of the total sample who reported particular reasons. *Figure 3* shows examinations to be the strongest motivator, followed by a desire to supplement school learning and by a perception that they were underachieving. Although the categories in the Sri Lankan data (*Table 8*) do not quite match those in Hong Kong or Malta, they basically indicate a similar situation in that country.

Figure 3. Reasons given by Maltese students for taking supplementary tutoring



Source: Falzon; Busuttill (1988), p.55.

Table 8. Reasons given by Year 13 Sri Lankan students for taking supplementary tutoring (%)

	Arts stream	Science stream	Commerce stream
1. I want to obtain higher marks	98	94	97
2. In tuition classes, I learn how to answer examination questions	97	94	89
3. Syllabuses are not covered in school	89	72	75
4. I can be well prepared when the teacher starts a new topic	88	86	85
5. I can use my free time profitably because of tuition	83	68	78
6. All students who learned from my tutor have passed well	77	49	76
7. The amount of subject matter taught in school is not sufficient to pass the examination	72	56	71
Highest number responding	206	215	199

Source: Gunawardena (1994), p.9.

As already indicated, students are more likely to demand tutoring at the secondary than at the primary level. This is especially the case in systems where the secondary examinations form a watershed between who can continue in school and who cannot; but it is also evident in systems with almost universal transition from one stage to another but in which major differences exist in the prestige of institutions and courses to which students can proceed. Another factor is that parents of primary children are more likely to feel competent themselves to help their children with homework. Even then, however, some may feel more competent than others (*Box 3*).

Box 3. A parent's concern

Mr Goh Soon Heng is a Singaporean who sends both of his school-aged children to private tutoring classes. He works as a vending-machine salesman, and he and his wife together earn about S\$1,000 (US\$770) per month. He spends about S\$130 of this on English and mathematics tutoring for his two sons, aged 10 and 14. His four-year-old daughter may also need tutoring eventually, he says.

Mr Goh feels that he has little choice in this matter. "If I don't give them, and they fail, I will put the blame on myself." He explains that he is not highly educated, and cannot himself guide his children with their school work. "The syllabus is more advanced than in my time," he points out.

Source: George (1992).

An additional factor is peer pressure among parents. Sharma (1997, p.18) points out that in Taiwan:

When parents find out that other parents are sending their children to bushiban [tutoring centres], they get worried and do the same.

In some societies a certain prestige can be derived from being seen to send children to particular high-cost tutors.

Research on gender biases in this domain has shown varied findings. Conventional wisdom anticipates that in many cultures parents are more willing to invest in the education of boys than of girls. Hussein's (1987) study appeared to show this to be the case in Kuwait. However, rough parity between genders has been reported in Egypt (Fergany, 1994, p.75), Malaysia (Marimuthu et al., 1991, p.28), Malta (Falzon; Busuttil, 1988, p.36), Sri Lanka (de Silva 1994a, p.24) and Taiwan (Tseng, 1998, p.98). In Japan, Stevenson and Baker (1992, p.1649) did not find statistical differences by gender in attendance of after-school classes, though they did note that males were more likely to join correspondence courses and were more willing to join *yobiko* for full-time tutoring after leaving school if the grades achieved at school were not considered good enough.

IV. Educational, social and economic impact

This section begins by reporting data on the impact of private supplementary tutoring on students' academic achievement. Different studies have reached divergent findings, and this domain is in particular need of further research. The section then turns to the impact of tutoring on the operation of mainstream schooling. As observed at the beginning of this booklet, the shadow system of supplementary tutoring differs from most other shadows in the ways that it affects the body which it imitates. Private supplementary tutoring also has major implications for aspects of social and economic development.

Private tutoring and academic achievement

Identification of the impact of private supplementary tutoring on individuals' academic achievement is difficult because so many other factors are involved. Also, from a research perspective, populations of students who do and do not receive supplementary tutoring cannot easily be compared because they are rarely uniform in other characteristics. Studies need to allow for urban/rural and socio-economic differences; and ideally they should allow for the fact that in many (but not all) cases the majority of pupils who receive private supplementary tutoring are those whose academic performance is already good.

Path analysis provides one way to deal with the existence of multiple interlocking variables, and studies of this type have been conducted in Mauritius and Greece. Other studies which have had a different approach and are also worth reporting here have been conducted in Japan and Egypt.

In Mauritius, a test of reading literacy was administered to a carefully selected sample of Grade 6 pupils in 1995, and the results compared with a number of input variables (Kulpoo, 1998). *Figure 4* shows the resulting path diagram indicating the factors affecting literacy scores. The researchers distinguished between non-malleable

factors, which cannot be shaped by planners, and malleable factors which can be the focus of interventions. Supplementary tutoring was placed in the latter category, together with family interest, regularity of homework, human resources in school, and frequency of teacher/parent interaction. Extra tuition was shown to be the strongest malleable factor, though not as strong as the non-malleable factors of English spoken in the home and the socio-economic level of the home. Supplementary tutoring explained considerably more of the variation in test scores than did the frequency of teachers' meetings with parents, the location of pupils' homes, the nature of school furniture, or the access to classroom libraries.

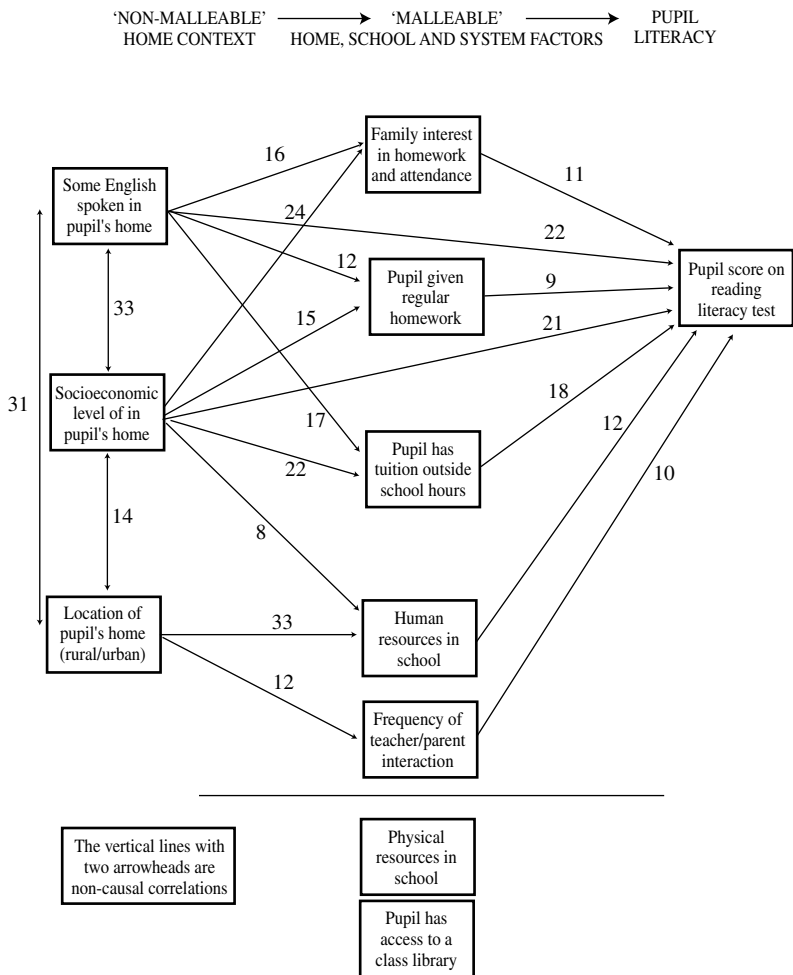
The work in Greece by Polydorides (1986) was conducted at the senior high school level. It also found some positive correlations between private tutoring and academic achievement, but they were much weaker and not completely consistent. *Figure 5* shows the path diagram which identified determinants of scores in students' Grade Point Averages (GPAs). It distinguishes between private tutoring and cramming. To explain the difference, Polydorides (1986, p.5) indicated that:

Cramming refers to preparation for the national examination organized privately either in special institutions (established for this purpose) or as tutorials on an individual basis [T]he state has established its own cramming centres for secondary school graduates wishing to participate repeatedly in the national examination. Private cramming continues parallel to the state operations for these graduates, with the same intensity as ever.

Presumably the variable X_2 refers to private operations, while X_3 refers to state operations. *Figure 5* shows a small positive correlation between tutoring and achievement as measured by GPAs, though a separate analysis of achievement as measured by scores in the national examinations showed a small *negative* correlation.

*The shadow education system:
private tutoring and its implications for planners*

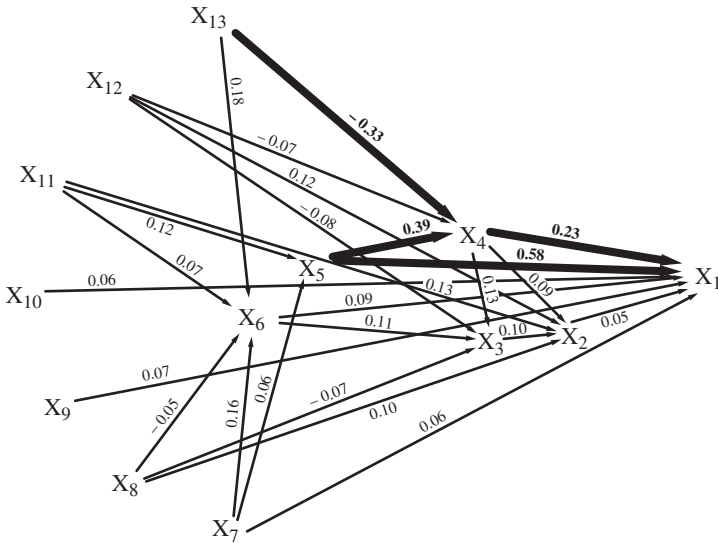
Figure 4. Path diagram for analysis of factors affecting reading literacy, Mauritius



Note: The regression equation using all predictors above explained 35 per cent of pupil variance in reading scores.

Source: Kulpoo (1998), p.81.

Figure 5. Path diagram for analysis of influences on Senior High School achievement, Greece



Variables: X_1 = achievement at the end of senior high school (GPA); X_2 = private tutoring (week-hours); X_3 = cramming school (months); X_4 = senior high school track; X_5 = educational attainment in junior high (GPA); X_6 = senior high school educational/operational characteristics (students per teacher in examination subjects); X_7 = community type; X_8 = family's material status; X_9 = student's work status; X_{10} = father's occupation; X_{11} = father's education (number of years completed); X_{12} = mother's education; X_{13} = gender.

Source: Polydorides (1986), p.17.

In Japan, Sawada and Kobayashi (1986) analyzed the effect of *juku* attendance on mathematics performance of upper elementary and lower secondary students. The study extended work conducted under the auspices of the International Association for the Evaluation of Educational Achievement, and covered 375 pupils in eight schools. The researchers observed that time spent in *juku* gave students greater opportunities to learn, and that this resulted in higher scores in problems requiring arithmetic calculation and algebra. However, the researchers did not find higher scores in arithmetic application

and geometry (Sawada; Kobayashi, 1986, p.22). This may be taken to reflect the types of curricular emphasis which dominated *juku* classes.

Finally, two studies have been conducted in Egypt. In 1990/91 the Ministry of Education surveyed 18,000 pupils in the primary and preparatory stages of education (reported by Fergany, 1994, p.9). Variables that were found to have no significant effect on pupil achievement included gender, private tutoring and in-school tutoring groups. Fergany and colleagues conducted follow-up research at the primary level in 1994. This survey focused on three different parts of the country and covered 4,729 households with 7,309 individuals. The researchers again found no statistically significant correlations between private tutoring and achievement (Fergany, 1994, p.108).

One conclusion from these mixed results is that more research is needed on the topic. Meanwhile, planners cannot assume that private supplementary tutoring either does or does not necessarily increase academic achievements of pupils. Much presumably depends on:

- the content and mode of delivery of the tutoring;
- the motivation of the tutors and the tutees;
- the intensity, duration and timing of tutoring; and
- the types of pupils who receive tutoring.

Logically, one would expect, as noted by Sawada and Kobayashi (1986), that even a minimum of tutoring would provide more time on task and therefore more opportunity to learn. However, the research has not demonstrated that this is always translated into achievement as measured by test scores.

Impact on mainstream schooling

The next question concerns the implications of private supplementary tutoring on other aspects of mainstream schooling. Evidence from a range of contexts shows that it may affect the

dynamics of teaching and learning in mainstream classes. For example, where all students receive supplementary tutoring, mainstream teachers may not need to work so hard. Where some students receive supplementary tutoring but others do not, mainstream teachers may be confronted by greater disparities within their classrooms than would otherwise be the case. Some teachers respond to these disparities by assisting the slower learners; but others may take the students who receive tutoring as the norm, and permit the gaps between students to grow. In the latter case, all parents are placed under pressure to invest in private tutoring for their children.

When supplementary tutoring helps students to understand and enjoy their mainstream lessons, it may be considered beneficial. De Silva (1994b, p.5) has observed that supplementary tutoring can enable remedial teaching to be undertaken according to individual needs.

Sometimes large gaps in students' learning are created due to a number of factors such as student and teacher absence, frequent closure of school, ineffective teaching and negligence on the part of the teacher. It is not every school that can boast a full complement of specialist teachers in crucial areas like mathematics, science and English. Immature, inexperienced or unqualified teachers handling these subjects may not be able to lead the students to a proper understanding of the sections taught. Effective private tuition may help overcome these gaps or deficiencies in students' learning and build their confidence enabling them to compete with others and experience a happy and pleasant life.

Supplementary tutoring may also help relatively strong students to get more out of their mainstream classes, exploring various dimensions in greater depth. Yiu (1996, p.78) reported that Hong Kong teachers in his study of upper secondary classes were positive about supplementary tutoring. Among the comments were:

- since the school used English as the medium of instruction, students benefited from hearing the content again in Chinese in the tutoring institute;

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- schoolteachers could cover the main ground, while tutors would help consolidate; and
- tutors provided extra questions for students, which the schoolteachers were too busy to do.

Yiu added (1996, p.66) that some teachers gained ideas from the tutors. One teacher explicitly requested his students to bring materials from the tutorial institute to school, so that the teacher could use them to improve his own teaching.

Sometimes, however, tutoring is reported to have a negative effect on mainstream classes. Writing about Kuwait, Hussein (1987, p.92) stated that:

Tutoring has caused a great lack of interest on the part of students. They have reached the point of thinking that as long as they can pay someone who will show them how to pass their examinations, they do not need to attend school classes except when they are required to do so by school regulations.

Hussein reported (p.92) that in some schools the number of absentees had risen:

In particular two months before the school year finally ends [the students] stay at their homes in the morning and attend tutorial institutes in the afternoons. This cripples the school system. A second group of pupils comes to school just to avoid being questioned by the school administration but shows no interest when there. These two groups affect the third group, which is small, of those students who attend intending to learn. This group cannot find a suitable atmosphere to learn because of the behaviour of the class as a whole and also the fact that the teacher is disturbed by the abnormality of the situation.

Making a related comment with reference to Sri Lanka, Nanayakkara and Ranaweera (1994, p.14) indicate that some students do not pay adequate attention to lessons in the mainstream

system either because they have already covered the topics with the tutor, or because they are unimpressed by the teaching styles in the mainstream system. Nanayakkara and Ranaweera referred to a study by the Ministry of Education which, they said (p.14), indicated that the majority of students, particularly in the higher grades, felt that the quality of instruction in the tuition class was superior to that in the school.

This has a negative influence on the respect they have for and confidence in the classroom teacher and his teaching. Such an unsatisfactory state of affairs ... leads to a further deterioration of classroom teaching resulting in a vicious circle where negative student behaviour and non-participation in the teaching-learning process leads to poor quality teaching, poor quality teaching leads to private tuition, and private tuition leads to negative student behaviour in the class which in turn leads to further deterioration of classroom teaching and so on.

The Japanese data provided by Sawada and Kobayashi (1986, p.9) are also instructive in this respect. Many teachers, especially in the lower secondary schools, reported that pupils who attended *juku* were good at computational skills. However, they said that the pupils worked mechanically and without understanding underlying meanings. Forty-five per cent of the secondary Form 1 teachers added that the pupils attending *juku* did not take the mainstream mathematics classes seriously; and between 27 per cent (secondary Form 1) and 50 per cent (primary Grade 5) of teachers indicated that pupils who attended *juku* refused to participate in after-school activities.

Private tutoring may also lead to imbalances in the allocation of teachers to particular grades within individual schools. Where mainstream teachers are tutoring their own pupils, teachers are likely to prefer classes in higher grades and/or classes in which examination pressure is greatest and therefore in which demand for tutoring is greatest (*Box 4*). In turn, this may mean that relatively weak teachers are allocated to the lower grades, and that the foundations of the system are threatened.

Box 4. Securing the ‘best’ jobs in schools

Mikumi Primary School is on the outskirts of Dar es Salaam, the largest city in Tanzania. As in many other schools in Dar es Salaam, supplementary tutoring has become an institutionalized way through which teachers raise their salaries. Parents are expected to pay fixed rates: 1,000 shillings (US\$1.50) per month and per subject for Standards 1, 2 and 3, 1,500 shillings for Standards 4 and 5, and 2,000 shillings per month for Standards 6 and 7. Approximately 40 per cent of Standard 1 pupils pay for tutoring; but the proportion rises to 70 per cent in Standard 7.

The headteacher is under considerable pressure to allocate the ‘best’ jobs to certain teachers. The best jobs are seen as the ones which will guarantee most money, namely teaching of mathematics, English and science in Standard 7. The other subjects and the other grades suffer from varying degrees of neglect.

Source: Vimpany (1998), p.13.

For many participants, supplementary tutoring also leads to fatigue. Most obviously affected are the pupils who go straight from mainstream school to supplementary class; but also affected are the tutors, especially when they are also mainstream teachers. Concerning Egypt, this has been mentioned by Hargreaves (1997, p.169). It has also been observed in Sri Lanka, where, according to de Silva (1994a, p.5), everybody is tired because of the “continuous teaching-learning process going on from morning until evening on weekdays and during weekends and school holidays [which] denies both teachers and students sufficient rest and recreation”. Not only does this produce fatigue in both teachers and pupils, he states, it makes them ‘relax’ when at school, thereby reducing the productivity of that part of each day.

Supplementary tutoring is of course less likely to lead to fatigue for tutors who are not also teachers in the mainstream system. However, a different problem may arise: that the mainstream loses some of its most talented personnel because they decide to work in the shadow system rather than in the mainstream. This problem has been evident in countries as different as Costa Rica, Lithuania and Senegal.

Another factor, especially prominent in systems where supplementary tutoring is provided by teachers who already have responsibility for their tutees in the mainstream system, concerns coverage of the syllabus. In a Moroccan survey by Caillods et al. (1998, p.119), 62 per cent of science teachers at the *collège* (junior secondary) level stated that the syllabus was so full that they could not cover all of it during normal school hours. Allied to this was the fact that 34 per cent of science teachers at this level provided supplementary tutoring. In the *lycées* (senior secondary schools), 70 per cent of teachers said that they could not cover the curriculum during normal hours, and an equivalent proportion indicated that they provided supplementary tutoring.

One major problem with this situation is that teachers might have an incentive to describe the curriculum as too full, and, as already noted, might deliberately slow down their pace of delivery in order to ensure that they have a market for the after-school supplementary classes. This is said to be a widespread practice in Bangladesh, Cambodia and Egypt, for example. Some teachers in those countries even deliberately omit from their mainstream lessons parts of the curriculum which they know are essential for success in examinations. Such teachers also have a vested interest in a harsh examination system and in the possibility of pupils repeating grades, and are thus likely to favour features of the education system which are not necessarily in the interests of the pupils.

Once again, however, much depends on the nature of the society and on the framework of the environment within which tutoring is or is not provided. Falzon and Busuttill (1988, p.113) reported that teachers did not favour the scale of supplementary tutoring and the early age at which pupils commonly commenced it in Malta. A quarter of the teachers in their sample considered supplementary tutoring unnecessary at any level; and most of those that did favour it, primarily did so for reasons which could be considered educationally sound, namely to provide instruction in subjects not taught in school, to help underachievers, and to help pupils who had been absent for long periods.

Moreover, analysis of the shadow education system must take full account of the positive as well as the negative aspects. In their efforts to respond to market needs, some entrepreneurs are innovative in both content and delivery (*Box 5*). Further, at least in the elementary years, many Japanese *juku*, which are frequently depicted as dark dens of cramming and memorization, come closer to being extracurricular homerooms. Russell (1997, p.158) notes that one survey in Tokyo found that the most popular reason for enrolling children in *juku* was “to raise children’s motivation to study”; and another poll found that the least cited reason for going to *juku* was “to learn test-taking techniques”. In a study by the Japanese Ministry of Education, parents of elementary school pupils most often said that the benefit of attending a *juku* was that the children learned how to study by themselves.

Box 5. Harnessing technology for education

In order to attract students, some tutorial institutions make great efforts to harness the latest technological advances. One such institution is Nagase Brothers, one of Japan’s largest *juku*. This company, which is among the nine *juku* listed on the stock exchange, uses satellites to relay lectures by Tokyo professors to 30,000 high school and ‘cram’ students sitting in 680 franchise and company-owned classrooms nationwide. Students listen to the lecturers, whom they already know through test prep books, in screening rooms. They can fax and e-mail questions to the lecturer, and review the lesson by re-watching a video or studying a company-produced booklet. The company produces 2,000 new lectures a year, for which it owns the rights.

By applying technology and business approaches to traditional methods of instruction, Nagase is creating an educational system reminiscent of Japanese manufacturing processes that can be economically reproduced and distributed to far-flung markets. The approach has enabled a relative newcomer to leapfrog over the long-established tutoring institutes which have traditionally relied on the lengthy and expensive process of building schools near train stations and hiring local teachers.

Source: Russell (1997), p.166.

Finally, the curriculum emphasized by tutorial institutions, especially ones of the cramming type, may be contrasted with that in mainstream schools. Especially in public systems of education, schools

are expected to achieve a wide range of goals. The goals may include development of rounded individuals who have sporting and musical as well as academic interests, and promotion of courtesy, civic awareness and national pride. Mainstream schools may also be required to keep all students of one grade together, in order to reduce labelling of low achievers. Examination-oriented tutorial institutes, by contrast, cut what they perceive to be irrelevant content in order to focus on passing examinations, and may have much less hesitation about grouping students by ability. Many analysts view this phenomenon negatively, arguing that the tutorial institutes distort the overall curriculum which has been designed with careful balance by specialists in that task. However, the phenomenon may also be seen as an expression of public demand, and perhaps even as a check on curriculum developers who might otherwise become too idealistic in their goals.

Social implications

Under the heading of social implications, three areas demand particular attention. They are: the consequences of pressure on students, the impact on social relationships, and the implications for social inequalities.

Pressure on students

It is obvious that children who attend both mainstream and supplementary classes are placed under considerable pressure. “Four hours’ sleep for success, but five hours’ sleep for failure” was at one time a well-known phrase in Japan, which referred to strategies considered necessary for passing the college-entrance examinations (Tsukada, 1991, p.8), and which both reflected and contributed to the culture of supplementary tutoring in that country. Other societies may be less extreme; but pressure may still be very evident at all levels (*Box 6*). In Mauritius, one Minister of Education (quoted by Foondun, 1992, p.26) has queried the appropriateness of social forces which lead children to spend an average of nine hours a day in private tutoring and regular schooling, when adults in that country have achieved a seven-hour standard day. In effect, he pointed out, children are made to work for longer hours than their parents. A government White Paper asserted (Mauritius, 1997, p.7) that:

Box 6. The pressures on schoolchildren - a Hong Kong perspective



Girl 1: I must do my homework
Boy: I must go to the private tutoring class
Girl 2: I must go back to prepare for the Bio test tomorrow



Girl 1: I think we've got enough time for the 'nuclear bomb' game
Boy and Girl 2: OK



BOOM! BOOM! BOOM!



Girl 1: This 'advanced' education system makes our play time shorter and shorter.

Source: Cheng (1977), p.19.

Our children are unable to live their young life fully. They are largely abused by their parents' over concern for diplomas and certificates, thus putting enormous pressure on young brains and probably setting them into undesirable attitude patterns as a result of a super competitive education system and a work environment that has no place for initiatives, adaptability and creativity

Another report on Mauritius (UNICEF, 1994, p.36) observed that the pressure to pass the Certificate in Primary Education examination was so great that in several cases each year it burned out the learning momentum of the children. Principals, the report added, have talked about children coming to their secondary schools in a state of physical and psychological depletion. "Failure can stigmatize a child", the report remarked, "and success is obtained at too great a cost".

On the more positive side, it may be argued, pressure may also bring out the best in students and stretch them to maximize their potential. For example, East-Asian societies influenced by Confucian traditions tend to place great value on discipline and dedication, and to see the pressure applied by supplementary tutoring as generally beneficial. To some extent, therefore, the degree of pressure that is considered appropriate is determined by social and cultural norms. Some educators would add that where supplementary tutoring helps pupils to keep up with their peers, it may protect their self-esteem. These commentators would therefore assert that although pressure may come from one side, it may alleviate pressure on a different side.

Much may also depend on the level and type of tutoring. Russell's (1996) analysis of the Kumon approach to teaching mathematics in Japan, which goes from pre-school to college levels but is most popular in the lower primary grades, found that most children considered it an unthreatening experience. Russell (1996, p.259) quoted research which indicated that nearly 40 per cent of the families who enrolled their children in Kumon classes did so because the children liked the experience.

However, many analysts concerned with other contexts, including higher levels of education and other forms of tutoring, consider the negative aspects outweigh the positive ones. Wijetunge (1994, p.16) is among such people, and has pointed out that in Sri Lanka:

Immediately after school the child is rushed to tuition class after a hasty snack. At tuition, his skills and abilities are relentlessly pitted against those of his age mates, for competition is the name of the game and the prowess of the tutor rests on the results he produces. The age-appropriate developmental tasks such as building wholesome attitudes towards oneself, learning to get along with peers, developing conscience, morality and a scale of values stand a very poor chance in this climate of cruel competition.

Wijetunge adds that sporting and leisure activities get crowded out by supplementary tutoring, and points out that book-learning and examination scores are often achieved at the expense of other types of education which are also arguably of major importance. In the Malaysian survey conducted by Marimuthu et al. (1991, p.87), 36 per cent of students agreed with the statement “Tuition dominates our lives”, and only 18 per cent disagreed. More research is needed on this topic, but the number of cases of student depression and even suicides in Japan, Hong Kong and Taiwan that are related to schooling problems provides a stark reminder of the impact of extreme pressure on young minds (Zeng; LeTendre, 1998).

Social relationships

De Silva (1994a, p.6) pointed out that when children are away from home most of the time, family bonds of affection are inevitably weakened. Youths may be poorly supervised at and on their way to/from tutoring centres, and this, he added, has contributed to significant social problems. Further, students sometimes rush to tutoring classes without proper food or rest, and after the classes they return home so late and tired that they are denied the free time needed to explore their own personal interests. Very often they are left without any time for religious observance, to the extent that church leaders in Sri

Lanka have demanded that tutoring centres should close on Sunday mornings to allow the students to join religious activities.

However, this picture should be balanced by noting the positive sides of structured out-of-school learning in some societies. In Rio de Janeiro, the largest city in Brazil, many parents send their children to after-school tutoring because they do not want the children to be hanging about on the streets which are potentially dangerous (Paiva et al., 1997). Supplementary tutoring may also provide a healthy framework within which young people can develop and can meet peers. Russell (1997, p.161) observed that close friendships may develop in Japanese *juku*, especially in the small neighbourhood classes run by retired teachers and housewives. She highlighted a *juku* teacher who consciously tried to create a club-like atmosphere and organized weekend hiking excursions. Research has indicated that 40 per cent of elementary-age users said they liked going to *juku* because they made friends, and a Japanese sociologist has observed that many middle school girls and boys find *juku* to be socially exciting, with the trading of notes, flirting, and the opportunity to meet students from other schools. Also important to some parents is that the tutors take much of the responsibility for enforcing the discipline of study, leaving the parents free for softer sides of harmony and leisure with their children.

Social inequalities

Like most forms of private education, supplementary tutoring is more easily available to the rich than to the poor. As such, private supplementary tutoring seems to be a mechanism which maintains and perhaps increases social inequalities. Where patterns become extreme, they could pose a threat to overall social stability (*Box 7*). Children from rich families are more easily able to pay for, and therefore obtain, both greater amounts of, and superior quality, tutoring. In Mauritius, Joynathsing et al. (1988, pp.32-33) showed that in primary Grade 1 the proportion of children receiving private tutoring in the highest income group was 7.5 times greater than the proportion of children in the lowest income groups, whereas the equivalent proportion in Grade 6 was 1.6:1.

Box 7. Social inequality and social instability

Egypt is among countries in which private tutoring is widespread, and in which much tutoring is provided by mainstream teachers to their own pupils. In many cases, the mainstream personnel teach less than they should during the school day in order to ensure that they have demand for the supplementary lessons. Students who cannot pay for extra classes thus receive less teaching than they should.

The situation has been sharply condemned by Egypt's Minister of Education, Dr Hussein Kamel Bahaa el Din, who has been among the people trying to tackle the problem. Private tutoring, he wrote in 1997 (p.99):

deprives financially limited students from receiving the necessary instruction from their teacher. This situation leads the deprived groups to become dissatisfied with their status and potentially resentful of those who have been able to have access to private tutoring or those who have successfully completed their examinations. This is a threat to social peace and is divisive. Meanwhile, those who have had access to private tutoring and were able to complete their examinations successfully will be unable to live in a peaceful environment because they will be living among a majority who had been deprived of the knowledge of their teacher, from a good education, and consequently from an honourable career. Such individuals will then be a constant threat to those who monopolized educational opportunities and this indeed is a threat to social peace in our country. Education that starts with a crime will inevitably end with a catastrophe.

However, the picture is not completely straightforward. Rich families also have other ways to maintain social superiority, and may use these ways as well as, or instead of, supplementary tutoring, particularly if decision-makers in these families perceive supplementary tutoring to involve excessive effort. Moreover, middle-income and even poor families may choose to invest in supplementary tutoring in order to gain social mobility through the examination system. Kwan-Terry's survey (1991, p.88) indicated that in Singapore the highest demand for tutoring in English was in families which did not speak English in the home and in which the father had an education below the university level but had middle-income earnings. In Cameroon, many of the clients for private tutors are medium- and low-income students in public schools. Richer families send their children to private schools, which are considered qualitatively superior and provide a form of education which many parents consider

adequate without supplementation. Poorer families cannot afford this, so instead they seek to bridge the gap by sending their children to private tutors, many of whom are also teachers in the private schools (Tembon, 1999).

Much also depends on the types of tutoring as well as the quantity. While mass tutoring institutions in Japan and Hong Kong may be inexpensive, they may also be limited in the extent to which they achieve gains in learning. Richer families can more easily afford one-to-one and small-group tutoring which is more closely tailored to individual needs and which may take place in the children's homes, while poorer families must tolerate mass-produced forms of tutoring for which the children may have to travel substantial distances.

Also important are urban/rural dichotomies. Since supplementary tutoring is in general more readily available in urban than in rural locations, middle-income and poor children in urban locations may have better access than their more prosperous counterparts in rural locations. The phenomenon shows that stratification is based on place of residence as well as on income level.

Table 9. Social stratification and private tutoring in Singapore

	<i>Level</i>			<i>Ethnic group</i>			<i>House type</i>		
	Total	Prim.	Sec.	Chinese	Malay	Indian	Govt. flat 1-3 rooms	Govt. flat 4-5 rooms	Private house/flat
% of students receiving tutoring	32	49	30	32	25	43	25	33	50
% of tutees taking									
English	72	84	49	72	95	52	89	73	47
Chinese	48	55	33	59	3	4	32	50	64
Malay	5	6	2	0	19	28	4	4	8
Tamil	1	2	1	0	0	14	0	2	1
Mathematics	78	80	80	78	86	69	86	84	59
Science	48	52	48	47	65	35	57	49	34

Source: George (1992), p.29.

In some societies, tutoring also maintains and exacerbates racial inequalities. This partly reflects inequalities in income and differences in urban/rural residence; but it also commonly reflects cultural patterns and the extent to which peoples of different races value certain types of education. *Table 4*, above, showed statistics on the extent to which students of different racial groups in Malaysia received tutoring. *Table 9* supplements this picture with statistics from Singapore, which is an almost completely urban society and which is thus largely unaffected by urban/rural dichotomies. As might be expected, more pupils who lived in private homes received tutoring than did pupils in government-supplied homes; and more pupils in larger government homes received tutoring than did pupils in smaller government homes. These figures reflected income inequalities. The figures also showed racial differences, with Indians receiving the most tutoring, Malays receiving the least, and Chinese occupying the intermediate position.

Economic implications

The substantial literature on rates of return to education (e.g. Psacharopoulos, 1994; Carnoy, 1997; Bennell, 1998) has almost exclusively focused on mainstream systems of education. However, some of the principles of that literature may be extrapolated to supplementary tutoring.

Empirical evidence demonstrates that, in general, individuals with higher levels of formal education attract higher lifetime earnings than individuals with lower levels of education. Advocates of human capital theory (e.g. Psacharopoulos, 1995) explain this by stating that the higher earnings reflect and appropriately reward the skills and attitudes acquired by the individuals during the educational process. An alternative view (Groot; Hartog, 1995) is that education acts as a screening mechanism through which only the individuals with inherent talents and appropriate attitudes are able to move beyond the various barriers.

To those who accept either of these hypotheses, supplementary tutoring may be considered in the same light as mainstream schooling. Advocates of human capital theory might consider supplementary

tutoring to be even more tightly related to economic enhancement, because it is closely tied to the demands of the market place and because enhanced economic return is among the chief reasons why pupils and their parents invest in it. Advocates of the screening hypothesis would approach the issue from a different standpoint, but reach a similar conclusion about the ways in which pupils who have received greater amounts of tutoring are allocated to more highly remunerated economic positions.

However, an alternative approach is less positive about supplementary tutoring. Critics argue that most parts of the sector are parasitic, that they waste both financial and human resources which could be better allocated to other uses, and that in systems which are dominated by traditional examinations, tutoring and associated cramming contribute to a stifling of creativity, which can have a damaging effect on the bases of economic production.

These views cannot easily be reconciled. They reflect broader debates on the nature and impact of mainstream education which rest as much on ideological principles as on empirical research. The broad literature on the links between education and development contains many unanswered questions and ambiguous findings (Carnoy, 1995; Heyneman, 1997). No clear formulae can link certain types and amounts of education to certain types and amounts of economic development: an observation which applies as much to supplementary tutoring as to mainstream schooling.

In these circumstances, planners and policy-makers would be unwise to adopt rigid approaches. Although Japanese *juku* of the cramming type are widely condemned as instruments which distort educational processes and damage children's lives, Japan has undoubtedly achieved remarkable economic success and it appears that the *juku* have played a major role in promoting that success. Russell (1997, p.155) observed that this is a matter of attitudes as well as skills. Attendance at *juku* habituates the Japanese to the idea of disciplined study outside school, a fact that may be increasingly important as technological and other changes overtake the ability of mainstream systems to provide permanent foundations for the lives of their pupils.

Supplementary tutoring may also have several important effects on the labour market which help to harness human resources. First, in many societies supplementary tutoring has a sort of child-minding function which liberates parents to take up employment elsewhere. In Malta, Falzon and Busuttill (1988, p.94) found that the highest rates of private tutoring were in families where both parents were employed. This was not just a reflection of the financial resources and the ambition of those parents; it also reflected the fact that families in which both parents were employed wanted structured frameworks for supervision of children. Viewing the phenomenon from a different angle, the existence of facilities for supplementary tutoring permitted both parents to enter the labour force and contribute their skills to the economy.

This observation is linked to a second possible effect on the labour market. In Japan, gender expectations remain highly stratified and married women are not normally expected to undertake paid employment. According to Benjamin (1997, p.519), the need for additional income to pay for *juku* and other forms of supplementary education is among the few culturally acceptable reasons for mothers to seek employment outside the home. In turn, this permits the mothers to contribute their skills to the economy.

The third, and perhaps most obvious, effect on the labour market concerns the employment of tutors. This booklet has shown that in some countries, tutoring is a huge enterprise. The corollary is that it employs large numbers of people, who in turn gain incomes and through their spending generate employment for others. While some of the tutors work full-time, others work part-time. Supplementary tutoring provides an avenue for part-time gainful employment for individuals who might otherwise be unemployed and whose talents might thus otherwise lie idle.

V. Diversity and evolution of education systems

Having noted some of the characteristics and implications of private tutoring, it is useful to return to the matter of change over time. As observed above, in some societies, supplementary tutoring has grown significantly during recent decades. In other societies, however, supplementary tutoring remains uncommon. The questions then arising are why tutoring is more evident in some societies than in others, and what forces determine change. Answers to these questions are important to planners seeking to devise appropriate responses for their own societies.

The diploma disease and late development effect

The year 1976 brought publication of an important book by Ronald Dore entitled: *The Diploma Disease* (reprinted 1997). The book focused on links between education, qualification and development, and highlighted the extent to which examinations and certificates rather than broader processes of education dominated the school systems of many countries. As Dore explained in his Preface (1976, p.ix):

Unfortunately, not all schooling is education. Much of it is mere qualification-earning. And more and more of it becomes so. Everywhere, in Britain as in India, in Russia as in Venezuela, schooling is more often qualification-earning schooling than it was in 1920, or even in 1950. And more qualification-earning is mere qualification-earning – ritualistic, tedious, suffused with anxiety and boredom, destructive of curiosity and imagination; in short, anti-educational.

Dore did not devote much specific attention to supplementary tutoring, but it was clearly part of the picture he was painting, especially because so much tutoring was (and is) geared to passing examinations rather than to broader processes of education.

A central pillar in Dore's conceptual framework was what he called the late development effect. He suggested (p.72) that:

the later development starts (i.e. the later the point in world history that a country starts on a modernization drive); the more widely education certificates are used for occupational selection; the faster the rate of qualification inflation; and the more examination-oriented schooling becomes at the expense of genuine education.

Dore sought to demonstrate this hypothesis with particular reference to England, Japan, Sri Lanka and Kenya. He suggested that in England, the symptoms of the disease were relatively mild, but that in the other countries the symptoms became progressively more acute. The main reasons, he hypothesized, lay in the labour market. In Sri Lanka and Kenya, a huge gulf existed between the so-called modern and traditional sectors of the economy. Individuals with modern-sector jobs, access to which was strongly determined by possession of certificates, had salaried incomes which were much higher and more secure than those of their counterparts in the traditional agricultural and informal sectors.

Compared with Sri Lanka and Kenya, Japan had more jobs per capita and less unemployment, and had a less marked gap between modern and traditional sectors. However, Dore pointed out, in Japan the question for individuals was not so much 'job or no job?', as 'which job?'. Major differences existed in the earnings, security and fringe benefits of what were considered the best jobs in the best companies, and recruitment for those jobs was chiefly from the prestigious universities. To gain access to those universities, candidates needed excellent examination scores from secondary schools. This in turn had a backwash on lower levels of the school system. The middle schools were preoccupied with preparing entrance examinations for the high schools, the primary schools were preoccupied with the entrance examinations to the middle schools. Thus the pressure for examination success creates a strong demand for supplementary tutoring.

Dore did not assert that England was devoid of the same pressures. However, he suggested that the manifestations of the diploma disease were less acute in that country, first because the gaps in standard of living between those who possessed advanced certificates and those who did not were less marked, and second because society had additional mechanisms for determining who got what jobs.

For present purposes Dore's work and more recent studies (Dore, 1997; Little, 1997) are helpful as a partial explanation of why supplementary tutoring may be less pervasive in England (and in other parts of Western Europe), and more pervasive in Japan, Sri Lanka and Kenya (and in comparable societies in Asia, Africa and Latin America). The explanation is linked to the existence of wide differentials between the 'haves' and the 'have nots', and to the extent to which examinations, and tutoring which promotes success in those examinations, are a critical determinant of which persons gain economic prosperity. Sri Lanka, Kenya and many other less developed countries remain sharply dual societies in which a gulf remains between modern- and traditional-sector jobs; and Japan and such countries as the Republic of Korea remain societies in which many more modern-sector jobs exist, but in which a wide gulf separates the 'best' from the other jobs.

Influences of culture and economics

Additional factors must also be brought into the picture. Among them are the influences of broad cultural elements and of economics. As noted above, many Asian cultures value disciplined study and are both competitive and status-conscious. This environment favours emphasis on tutoring, and is one reason why Kumon's mathematics materials have been successful among Asian immigrants in the USA as well as in Japan (Russell, 1996).

Cultural factors also help explain why Australia and New Zealand are similar to Western Europe in the general absence of supplementary tutoring, even though their national economies developed even more recently in history than did Japan's. Since dominant cultures in

Australia are relatively uncompetitive, few Caucasian Australians (as opposed e.g. to Asian Australians) see the need for supplementary tutoring at the primary level in order to keep ahead of their neighbours; and since mainstream educational structures in Australia are both flexible and supportive of individuals, little private supplementary tutoring is needed to help slower learners to keep up with their peers. At the secondary level, Caucasian Australians certainly see the importance of good examination results; but most are averse to repetitive cramming of facts, which in any case is generally less necessary for the types of examinations sat by the majority of pupils. Further, since differentials in the Australian labour market are less sharp than in Japan or Sri Lanka, the rewards for success and the penalties for failure in examinations are less severe.

Another important factor concerns the earnings of mainstream teachers. Teachers in Western Europe, North America and Australasia may not be completely happy about their remuneration, but they do receive salaries which are sufficient for a reasonable standard of living. As such, they are not driven to supplementary tutoring simply in order to survive. The same cannot be said of teachers in Cambodia and Lebanon, for example, which have been afflicted by civil war and in which the national governments have been too weak to demand the high levels of taxation necessary to pay teachers adequate salaries. A similar pattern became evident in the 1990s in Romania, Latvia and other countries of Eastern Europe, where government inability to pay teachers salaries at a level which matched soaring inflation required teachers to find alternative ways to generate income. At the same time, many of the best teachers left the profession altogether, thereby precipitating a decline in the quality of education, which forced parents to pay for supplementation to ensure that their children continued to cover syllabuses adequately. The rise of supplementary tutoring in these countries therefore had little to do with either broad cultures or the nature of examinations, but was instead a response to collapsing structures for paying teachers adequate salaries.

Whether for economic or other reasons, however, cultural factors may change. Concerning Japan, Tsukada (1991, p.114) has pointed

out that the prevailing climate shifted in the 1980s from ambition for social and economic success to an orientation towards self-expression. Despite Japan's economic prosperity and apparent educational successes as reflected in international rankings of educational achievement, society became increasingly concerned about problems of suicide, bullying, and acquisition of discrete knowledge relevant to examinations rather than to real life (Abiko, 1998, p.17). Responses by the Ministry of Education included change of the school timetable from a standard six-day week towards a standard five-day week, reform of upper secondary education, and improved career guidance. Specific concern was expressed about *juku*, excessive attendance of which, in the words of an official document (Japan, 1995, p.7) "limits children's opportunities for play and experience of activities in everyday life appropriate to their stage of development". Planners decided that the shift to a five-day week would best be achieved in phases. In 1992, the second Saturday in each month was declared a school holiday, and in 1995 the fourth Saturday was added. One concern was that *juku* attendance would simply expand to fill the gap, thereby defeating the purpose of the reform. However, initial evaluation suggested that this did not occur (Japan, 1995, p.26). Long-term patterns of course remain to be seen; but the developments suggest that government reforms and broader social change may be working together to change dominant patterns in Japan. Comparable moves have been evident in Korea (*Box 8*).

Yet while some societies have moved in one direction, others have moved in the opposite direction. Another feature of Japanese reforms may be contrasted with changes in the United Kingdom. The Ministry of Education in Japan (1995, p.7) noted that school rankings were a serious problem which contributed to the competitive nature of society. The document continued (pp.7-8) by noting:

a strong tendency to emphasize the single criterion of 'standard score' when judging educational institutions, with the result that little attention is paid to the diverse characteristics of Japan's many universities, junior colleges, upper secondary schools, and other educational institutions. Heavy reliance is also placed on standard score as the sole

Box 8. Examination dominance in Korea. Critique and response

In 1991, a document produced by the Ministry of Education in the Republic of Korea observed (p.71) that:

The strong desire of Koreans for education, which has few parallels anywhere in the world, is the major driving force for national development. On the other hand, it has led to pursuit of education with a narrow definition. There is a trend to view education as a mere vehicle for advancing to the next highest level of schooling and of gaining a diploma. It is also interpreted as a means for obtaining higher socio-economic status, which is often mistaken for the goal of life.

The document continued (p. 73):

As teachers gear education programmes to preparing for examinations, rote-learning and memorization dominate classroom instruction. Focus is on subject matter to be contained in the examinations to the virtual exclusion of reasoning and critical thinking skills. Extra lessons carry youngsters through study well into the night, designed to cram into the head fragmentary knowledge which is likely to be included in the examination. With the primary concern the volume of information retained, teachers lose sight of the real goal of education. Education of the whole person no longer finds its place in the curriculum. No opportunities are provided to nurture moral qualities and aesthetic sensitivity.

Subsequently, a Presidential Commission on Education Reform announced proposals to tackle the problem (Korea, 1996, p.87). Standardization of content and management was to be reduced, and room expanded for nurturing the growth of individual talents and interests. Schools were told to be sensitive to the real needs of their pupils, and regulations were made more flexible. Whether in the long run the reforms will achieve the goal remains to be seen; but at least the authorities were trying.

criterion when providing children with career guidance, and in many cases inadequate consideration is given to the diverse personalities, interests, concerns, abilities, and aptitudes of individual children This analysis of the causes of excessive competition in entrance examinations highlights the extreme importance of such efforts as

avoidance of evaluations that rank schools vertically, correction of the tendency to base judgements of school quality on a single criterion, and modification of approaches to evaluation that judge children in terms of a single criterion.

During the 1990s, the government of the United Kingdom moved in the opposite direction of insisting that schools be ranked on examination scores (Walford, 1996, p.57). Ranking of institutions commonly promoted ranking of individuals. Ironically, the reform was partly based on admiration of perceived academic achievements in societies such as Japan. The United Kingdom has been cited here as a society in which private supplementary tutoring is relatively rare; but public ranking of individuals and schools is among the factors which would encourage such tutoring to grow.

Educational changes arising from political changes have also been evident elsewhere. Thus an additional reason for the rise of supplementary tutoring in Central and Eastern Europe during the 1990s was, in the words of Švecová (1998, p.82), that education was “increasingly seen as a means toward social advancement whereas in the past in the communist bloc political connections were perceived as the key factor”. In the very different context of California, USA, private tutoring at the upper secondary level mushroomed after the mid-1990s, when universities and colleges were required to abandon admissions policies which had given special treatment to minority races and instead gave more emphasis to academic performance on standardized tests (Schwartz, 1999, p.51). Such observations emphasize the ways that societies, and therefore demand for private tutoring, may change.

VI. Policy responses and options

Alternative approaches

The above discussion shows that government policies concerning supplementary tutoring must begin by assessing the context. Settings in which teachers are so underpaid that they have to provide private tutoring in order to gain adequate incomes are rather different from settings in which teachers are already well paid and simply take extra earnings because the opportunity exists for further enrichment. Likewise, settings in which all supplementary tutoring is provided by personnel who do not teach in mainstream schools are rather different from settings in which mainstream teachers are providing private tutoring for pupils for whom they are already responsible in the mainstream.

In the context of this diversity, six basic alternative approaches may be identified as follows:

1. *A laissez-faire approach.* In many countries, government policy-makers and planners have long traditions of ignoring the shadow education system. In some societies this reflects a deliberate *laissez-faire* approach, i.e. the policy-makers have considered the matter and have actively decided on a non-interventionist policy. In other societies the policy exists by default, simply because the relevant personnel are overwhelmed by other pressing demands.

Advocates of a *laissez-faire* approach to private supplementary tutoring can state strong justifications for their views. One argument is that markets are best left to regulate themselves in order to secure the optimum balance of quality and prices. Market forces can also provide diversity, and match producers with consumers. Perhaps even more powerful is the argument that governments should keep out of the domain of private tutoring because it is a complex arena with many financial and political traps. In most countries, governments are already heavily

involved in mainstream schooling; and in many settings the authorities are trying to reduce their involvement, both to decrease the burden on taxpayers and to give market forces greater rein. Precisely because private tutoring is a shadow sector, it is difficult to control.

While the complete *laissez-faire* approach is probably the most common, it is arguably not to be recommended. As this booklet has shown, supplementary tutoring can have far-reaching implications for the nature of mainstream education systems and for societies and economies. Governments in countries with extensive private tutoring should take a more active approach.

2. *Monitoring, but not intervention.* One slightly more active approach includes some monitoring to secure data on the size, shape and impact of the sector. This information is relevant to the planning of the mainstream education system and other social services. Arguably, governments should also have data on the incomes of tutors, both for the purposes of collecting taxes and as an item to be considered when determining the salaries of mainstream teachers. In practice, however, few governments collect data on private tutoring unless they intend to take specific action in the sector.
3. *Regulation and control.* A yet more active form of government engagement is one of regulation and control. Within this category is a wide range of options. For example, regulations might be restricted to non-educational facets such as the availability of fire escapes and adequate ventilation. More extensive regulations might cover fees, class sizes, syllabuses forbidding teachers to give private tutoring, and be backed up by inspections and sanctions. Regulations in Hong Kong specify that organizations giving lessons to eight or more persons at a time, or to 20 or more persons a day, must register with the government's Education Department. This permits the authorities to know the number of establishments, though it is only a minimalist approach. The government of the Maldives imposes a restriction on the private tutoring that can be undertaken by expatriate (mostly Sri Lankan) secondary teachers. The Maldivian authorities are

however unwilling to prohibit the practice altogether, since they recognize that opportunities to provide tutoring are among the factors which attract expatriates to take positions.

4. *Encouragement.* Another approach to the sector would be one of active encouragement. This policy would be based on the argument that tutoring provides instruction that is tailored to the needs of the pupils, and contributes to development of human capital, which benefits not only individuals but also whole societies. To some extent this view underlies the encouragement that the Singaporean Government gives to the tutoring by non-profit-making welfare organizations such as Mendaki and the Singapore Indian Development Association. A parallel initiative, known as Edusave, operates through both schools and families (*Box 9*). The Singaporean approach is also based on the goal of improved equity, recognizing that some individuals and groups need extra support in competitive societies. Elsewhere, governments might see supplementary tutoring as a way to raise the earnings of teachers and/or to reduce unemployment. Encouragement could remain at the level of words in policy documents, or it could move further to subsidies, dissemination of information to link potential tutors and clients, training courses for tutors, and taxation incentives.

Box 9. Meeting individual needs in Singapore

In 1993, the Government of Singapore launched an Education Endowment Scheme, popularly known as Edusave. It provides annual grants on the one hand to each school and on the other hand to each child aged six to 16. These funds can be used for educational programmes. Many schools now engage private individuals and/or agencies to conduct courses, e.g. in English speech training, creative thinking, and geography enrichment. The existence of Edusave subsidies permits the costs to individual pupils to be low. Students benefit not only from the allocations to their schools but also from the allocations to them as individuals. The courses may be conducted either during term time or during school holidays.

Source: Singapore (1998).

5. *A mixed approach.* A strong case can be made for prohibition of some types of supplementary tutoring, even if other types are permitted. For reasons that have been presented in this booklet, many observers are particularly critical of the practice of mainstream teachers gaining extra income from private tutoring of their own mainstream pupils, and this is the most obvious category of tutoring which can be prohibited. However, governments might still be willing to permit mainstream teachers to provide tutoring for other pupils. Or, if governments ban that category too, they could permit entrepreneurs who are not mainstream teachers to offer tutoring. This arrangement would allow personnel to provide both one-to-one tutoring and larger operations.
6. *Prohibition.* The most extreme approach to private supplementary tutoring is a total ban. This approach prohibits all supplementary tutoring of a commercial nature, though would normally permit voluntary or publicly-provided remedial tutoring for slow learners and others in need. Such policies would most commonly be based on recognition that private supplementary tutoring fosters social inequalities. Official bans on tutoring have been announced at various times in Cambodia, Mauritius, Myanmar, and the Republic of Korea, though in none of these cases were the bans very effective because the governments were unable to enforce them.

Focus on the producers

Elaborating on these observations, the measures adopted by planners may focus separately on the producers and the consumers of private tutoring. In societies where private tutoring is considered excessive, or likely to become excessive, planners can begin by identifying why the tutors provide the tutoring. If they do so because they are mainstream teachers who are forced by low official salaries to supplement their incomes, then the first step would be for the authorities to find ways to raise salaries. Of course this is easier said than done, especially because most such societies are poor and because the salaries of teachers in the public sector are tied to those

of civil servants. The Egyptian authorities have tried to tackle this matter by seeking other ways to raise teachers' incomes, providing in-service training, remunerating them for grading examinations, and offering housing and other benefits.

More broadly, the observation on low teachers' salaries emphasizes the fact that officials responsible for education must voice concerns about wider economic and social health, and since teachers' salaries in the public sector are mainly paid from taxation revenue, educational officials may need to focus on the size and nature of such revenue. Officials could usefully contribute to discussions on ways to make systems of taxation more efficient and effective.

A contrasting situation is one in which teachers are fairly well paid, as in Japan, Mauritius, Singapore and the Republic of Korea, but in which private tutoring is a flourishing activity. In this situation, a strong case can be made for prohibiting mainstream teachers from tutoring their own pupils. Ideally, official regulations would be backed up by peer pressure, perhaps including action by teachers' unions, in which mainstream teachers who accept payment for tutoring their own pupils are considered unprofessional. This has been achieved in Japan, Singapore and the Republic of Korea, and has to a large extent been achieved in Mauritius.

The next question concerns mainstream teachers who use their spare time for private tutoring of pupils for whom they do not already have responsibility in their mainstream schools. While a case can be made for prohibiting this type of activity also, it seems less serious than the previous category. Critics of such a situation would have to review wider social norms. Foondun (1992, p.17) noted that in Mauritius, teachers' motivation to provide extra tutoring arises from dominant cultures in the capitalist society: "The more money one makes, the more money one wants to make". A similar observation might be made about Hong Kong, in which teachers are already adequately paid, but some individuals take extra tutoring because of a desire to finance high-consumption lifestyles. Again, the authorities could prohibit such activities if they desired, aiming to call on public opinion and standards of professionalism to help enforce prohibitions;

but such actions would only be effective if supported by wider social norms.

The remaining question concerns tutoring by entrepreneurs outside the mainstream school system. Concerning these individuals and organizations, planners who devise regulations and systems of inspection might find assistance in professional bodies organized by the tutors themselves. The United Kingdom has an Association of Tutors, which, according to one source (Colbeck, 1992, p.50) “checks the qualifications and takes up the references of all prospective members, thus providing a benchmark of standards”. Membership gives public-liability insurance, a 24-hour hotline for legal advice, and regular newsletters and information. Associations of tutors also exist in Taiwan (Tseng, 1998). While such associations might not all operate with equal effectiveness, they could be bodies deserving official encouragement in some societies.

Focus on the consumers

Planners who consider supplementary tutoring to be excessive must also investigate the reasons why consumers demand tutoring, in order to find ways to reduce that demand. This strategy was recommended in the Republic of Korea when the government, which had earlier tried to prohibit tutoring, considered attacking the problem again. One commentary (*Asiaweek*, 1997, p.20) remarked that:

For Korean authorities to address their own shortcomings in primary and secondary education by banning private tutors is a bit like trying to eliminate robbery by ensuring that the entire population is poor.

Moreover, the commentary added:

In an increasingly competitive Asia, it makes no sense at all to legislate in favour of the lowest common denominator.

Insofar as demand for supplementary tutoring arises from social competition and a desire by parents to get their children ahead of

their neighbours' children, seven particular strategies can be adopted to reduce demand:

1. *Reduce economic differentials.* As noted, in societies such as Sri Lanka and Kenya, supplementary tutoring is in high demand because of the wide gap between modern and traditional sectors of the economy, and the fact that supplementary tutoring is a crucial vehicle for entering the gateway to the modern sector. Japan and the Republic of Korea have larger modern sectors, but still have wide gaps between the best-remunerated jobs and the others. If economic differentials can be reduced, then parents will have less reason to invest in supplementary tutoring and to pressure their children to comply with all the demands it entails.
2. *Make education systems less elitist.* In some countries, elitism has an obvious quantitative form. In most parts of Africa, huge numbers of children are pushed out at the end of primary school and are denied secondary places. In other societies the main quantitative watershed is between junior secondary and senior secondary; and in yet other societies the quantitative watershed is between senior secondary and tertiary. In addition to quantitative differentials are qualitative ones. Foondun's (1992) booklet about Mauritius was subtitled "the mad race for a place in a 'five-star' secondary school". He pointed out that some secondary schools had greatly superior teaching and learning environments than others, and that the type of school that an individual attended greatly affected that individual's subsequent life chances. Some education systems also have harsh systems of ability streaming, even at the primary level.

The implication for planners is that education systems need to be less elitist. Again, this is rather easier to say than to do. On the quantitative front, many countries are far from contemplating universal secondary education, and are even further from systems of mass higher education. However, even in these countries, attention can be paid to qualitative differences between schools. Planners should promote uniformity of standards, as far as possible not only within the public sector but also between the public and private sectors. They can also reduce streaming by ability and performance, especially at the primary level.

3. *Reform systems of assessment.* Parents are less likely to be competitive if they do not actually know how their children rank in comparison with others. Hong Kong schools have been urged to reduce the extent to which children are ranked in class from the first term of primary Grade 1. Educators point out that such ranking creates a sense of success for the top pupil, but creates a sense of failure for all pupils from the second place down. The competition promoted by this system among both parents and pupils is a major factor fuelling supplementary tutoring. If rankings are needed at all, they can be in different subjects rather than as overall assessments; but better still, many educators would argue, would be individualized assessments which encourage pupils to do their personal best against their own standards, rather than against the standards of the mass.

Planners can also consider reforming public examinations. As far as possible, examination questions should test skills and knowledge which cannot be achieved by cramming. Also, systems for awarding grades in examinations should be transparent and fair. Planners who wish to discourage mainstream teachers from seeking to secure private clients from their own pupils should be wary of the widespread advocacy of school-based assessment for pedagogical reasons; or if planners do encourage such assessment, they should ensure that decisions are not solely taken by individual teachers in isolation from school-level committees. While such school-based assessment may be justified on other grounds, the fact that it concentrates power in the hands of teachers creates temptation for those teachers to abuse the power. In Central and Eastern Europe, university entrance examinations are usually highly specialized not only by subject, but also by individual department. A pattern has grown up in which university teachers who set the examinations also offer private tutoring classes. This is another area with obvious dangers of abuse, demanding reform to make examinations standardized, neutral and transparent.

4. *Encourage teachers to be more supportive of slow learners.* While the previous three points refer mainly to parents who want their children to get ahead of their neighbours' children, a fourth

point relates to parents of academically low achievers. In some education systems, teachers are unsympathetic to slow learners: they expect the children to sink or swim, and if the children sink and drop out, the teachers are not unduly concerned. Parents of slow learners thus find themselves forced to invest in supplementary tutoring simply to allow their children to keep up with the minimum level of competence demanded by the school.

The remedy to such situations lies in arrangements which encourage teachers to be more flexible and supportive, and ideally to offer sensitive remedial support to slow learners on an unpaid basis during or after school hours. This would be achieved through professional bodies which offer training and guidance, and which help to change cultures in schools. Again, this cannot be contemplated on a wide scale in all education systems. It demands a higher degree of professionalism and competence than is generally found in many countries; and, in most settings, traditions of teaching can only be changed slowly. Nevertheless, it is a goal towards which planners should strive.

5. *Ensure that the curriculum is not overloaded.* Supplementary tutoring becomes necessary for almost all students when the curriculum is overloaded. This is among the factors which require teachers to move at a rapid pace, without allowing time for slow or even medium-speed learners. Curricula have a tendency to increase in volume as new materials are added without existing materials being trimmed. Planners need to assess the curriculum, to ensure that it can be covered appropriately within the normal school week, term and year without demanding supplementation.
6. *Find ways to make mainstream classes more interesting.* In some societies, private tutors market their services by offering more enjoyable and effective ways to learn than are typical in mainstream schools. Promises of a 'fun, activity' approach, perhaps supplemented by computer software and other aids, may be very appealing to families disenchanted by dry, traditional and teacher-centred approaches in mainstream classrooms. Demand for the alternative arrangements would be much reduced if the

mainstream classes were to become more innovative and learner-centred. In this respect, teachers in the mainstream can learn from the shadow.

7. *Promote public awareness.* Planners can also aim to reduce demand through publicity exercises which highlight the harmful effects of excessive supplementary tutoring. In Malaysia, Marimuthu et al. (1991, p.120) point out that private tutoring has become a preoccupation:

Stories of success attributed to private tuition are plentiful and parents, particularly those in urban areas, are more than willing to listen to these stories.

The Mauritian authorities have endeavoured to dampen demand for tutoring by embarking on a 'sensitization campaign' in collaboration with the Mauritius College of the Air (Mauritius, 1994, p.10). Public awareness can also be promoted through speeches, newspaper articles, television programmes and pamphlets. Planners may be able to stimulate parent-teacher associations, school boards of governors and other community-level bodies to ensure that disadvantaged children can receive tutoring, while dampening excesses where they occur.

VII. Conclusions

This booklet has shown that the shadow system of private supplementary tutoring is very widespread, and that in some parts of the world it is growing. Supplementary tutoring has major social and economic implications; and it can have a far-reaching impact on mainstream education systems. A central message of this booklet is that the shadow system deserves much greater attention by planners, policy-makers and researchers than it has so far received.

The booklet has also shown that the topic is complex. Because the nature of supplementary tutoring varies, different policies are needed for different societies at different points in time. Some planners may prefer to leave the market to regulate itself, but others may wish to intervene in various ways. The range of possible interventions is wide.

At the same time, the booklet has shown that private supplementary tutoring can have positive sides. It is a mechanism through which individuals can expand knowledge and through which societies can accumulate human capital. Because tutors must respond to market signals, they may be innovative and closely tied to the needs of their clients. Supplementary tutoring provides a structured framework for young people to spend out-of-school time; and it helps resolve some of the ambiguities where governments, on the one hand, aim for egalitarianism and uniformity but, on the other hand, permit social stratification and elitism (*Box 10*).

The growth of private supplementary tutoring may also be seen in the context of a worldwide shift towards the marketization of education and reduced government control. In many settings, this shift is viewed with ambivalence. Governments may have positive reasons for withdrawing the dominant role that they have played in many countries; but in some societies the rise of private tutoring appears to be a social response to inadequacies in government

quantitative and qualitative inputs. One result is an exacerbation of social inequalities.

**Box 10. Living with ambiguity.
The mainstream and shadow systems in Japan**

Harnisch (1994, p.330) described Japanese *juku* as “a necessary organization”. He added that they “close a sensitive gap in the Japanese education system between the teaching at public schools and the demands of the entrance exams”.

In Japan’s public school system, the dominant values are egalitarianism and uniformity. Mainstream teachers are bound by these two mandatory principles; but *juku* undermine them. Ironically, Japanese society accepts this fact because the *juku* act as a safety valve and ameliorate some effects of the mainstream system. Prosperous parents learn to live with equality in public elementary education because they can invest independently in *juku* and other aids to success in examinations. Parents of high achievers send their children to *juku* to study advanced materials, and parents of low achievers send their children to *juku* to catch up with remedial work. *Juku* track children by ability and focus solely on test preparation in a way that public schools cannot and may not want to do. The operation of the *juku* permits the formal school to continue to function according to the principles of egalitarianism and uniformity (Kitamura, 1986, p.161).

On a conceptual plane, analysis of private supplementary tutoring requires modification of some paradigms used to classify private provision of education. Concerning private schools, James (1988, 1993) distinguished between institutions which cater for differentiated demand (e.g. with different curricula for religious or linguistic minorities) and ones which cater for excess demand (i.e. catering for students who were unable to gain places in public schools). James suggests that the former are most common in industrialized countries, while the latter are most common in less developed countries. Private schools catering for differentiated demand are by definition different in orientation from the public schools, while private schools catering for excess demand are likely to mimic the public schools.

Supplementary tutoring, by contrast, may require a completely new framework for classification. Some tutoring may cater for

differentiated demand. This would include lessons in music, art, sports, ballet, etc., which are important for rounded personal development and are a form of cultural capital for the recipients. Like differentiated demand for private schools, the phenomenon primarily exists in industrialized countries. As noted at the beginning of this booklet, such lessons have been excluded from discussion here because the focus has been on academic subjects taught in mainstream schools. For academic subjects, demand is not generally differentiated: parents want extra teaching in the subjects which are already taught in their children's schools, and this is the case for both high- and low-income groups in both industrialized and less developed countries.

A further conceptual difference is that demand for all supplementary tutoring may be described as excess, in the sense that parents can and do pay for extra lessons on top of those provided by the mainstream schools. This raises another question with far-reaching policy implications, namely: if so many parents, even of children in public schools, can and do pay for supplementary tutoring, is it sensible for governments to try so hard to make public mainstream schooling free of charge? Since so many families are able and willing to pay for supplementary tutoring, in some situations a case might be made for charging those families fees in the mainstream too. The revenue from those fees could then be used to improve the circumstances for the poor, e.g. by financing scholarship schemes. Revenue from fees could also be used to improve quality in mainstream schools. This would benefit all children, both rich and poor, and perhaps reduce the need for tutoring in the first place, especially where it exists because:

- the teachers are so underpaid that they are forced to provide tutoring to gain extra income;
- the teaching profession is so underpaid that it attracts only inferior personnel who are therefore unable to teach properly; and/or
- the schools have so little equipment that the processes of teaching and learning are inefficient and supplementary tutoring is needed to bridge the gaps.

This booklet has of course pointed out that these are not the only reasons why supplementary tutoring exists. In many settings, tutoring

is a response to the competitive nature of society in which parents are anxious for their children to get ahead of their neighbours' children. But again the point may be made that if such people are able and willing to pay so much money for private supplementary tutoring, then it is questionable whether they should be given mainstream schooling in the public system free of charge.

These notions, it must be recognized, are quite radical and would require careful debate in individual national and local settings. Policy-makers and planners may prefer to leave undisturbed the existing arrangements for fee-free education in public schools because the arena is extremely complex. Meanwhile, however, researchers should investigate in more detail the nature and impact of different modes of private supplementary tutoring on social inequalities and economic development in different societies. More research is also needed on the effectiveness of supplementary tutoring on raising academic achievement in different circumstances, and on the impact of the shadow system on the mainstream.

While awaiting this further research, however, the strongest message of this booklet remains. This message is that from a policy-making and planning perspective, supplementary tutoring deserves much more attention than it has been given in most societies. If the booklet has stimulated some thought on this topic, it will have achieved its main objective.

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