

# **Equity and Decision Making in the Transition to University Education in Egypt**

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## **Introduction**

In Egypt, before 1952 university education was the province of a privileged few. After the 1952 Revolution, in pursuit of social justice and economic development, Egypt's leaders eliminated university fees, instituted a universal admission examination, promised government employment to all university graduates, and expanded the number of university places. Officials expected these policies to increase socio-economic equity as enrollments grew. Following the Revolution, major changes also took place in secondary education. Beginning in the 1950s and continuing through the end of the last century, technical secondary education expanded rapidly. Technical students came to predominate among those enrolled in secondary school. But technical students are disproportionately poor and are almost completely excluded from access to university education. We show how entry into university is largely determined by type of secondary school attended. We discuss what underlies decisions about secondary and higher education choices. Some students choose early in their educational careers not to pursue academic secondary and higher education. Others work hard, but their score on the qualifying exam prevents them from attending academic secondary. Finally, there are the students who qualify for academic secondary, but because of social, economic, or cultural reasons decide not to pursue that path. We consider the reasons for these choices.

## **Background**

In 1952, higher education in Egypt comprised just three national universities—Cairo, Alexandria, Ain Shams<sup>1</sup>—with a combined enrolment of less than 50,000 students (SCU 2006; Richards 1992) who were generally the children of the Egyptian elite (Arabsheibani

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1988; Hyde 1978). Following in a long tradition that “assumed that, by making more facilities available, there would be a marked change in the social composition of student bodies” disproportionately benefitting children from poor families (Halsey 1972, 7; see also Blossfeld and Shavit 1993; Chapman and Austin 2002), the revolutionary regime committed itself to expanding educational opportunity in pursuit of social justice and economic development (Howard-Merriam 1979). These goals were codified in the 1971 constitution stating that education is the birthright of every Egyptian child (Hyde 1978) and that it fulfills two basic principles: equity and equal opportunity (el-Baradei and el-Baradei 2004). Specific policies designed to achieve these educational goals and targeting higher education included: 1) guaranteed university admission for all qualified secondary school graduates; 2) a universal examination to level admission criteria; 3) elimination of university fees; and 4) a guarantee that all university graduates would be given positions in the civil service (Arabsheibani 1988; Shann 1992; Antoninis 2001).

The Egyptian higher education system, consisting of two tracks—university and upper-intermediate—is state-organized and controlled. The Supreme Council of Universities determines the number of students to be admitted to each faculty (SCU 2006), while the Ministry of Higher Education specifies targets for higher education admissions in general (Helal 2007). Over the years, the number of universities has expanded. Assiut University opened in 1957, and seven more universities were added between 1972 and 1976 (World Bank 2002). By 2006, six more universities had opened for a total of seventeen public universities in Egypt (SCU 2006). New universities were established in provincial cities throughout the country to provide a more “democratic” geographical distribution of educational opportunities (Shann 1992). In this same era, a system of two-, four-, and five-year postsecondary colleges and “higher institutes” was initiated.<sup>2</sup> In 2000, there were forty-seven two-year upper-intermediate technical institutes, plus four four- or five-year higher technical institutes (World Bank 2002).

Enrollments grew rapidly in response to the new policies and expanded facilities. According to Szyliowicz (1973), university enrollment was just 35,000 in 1951. It more than doubled to 77,000 in 1958, and almost doubled again to 140,000 in 1969. Very rapid growth during the 1970s brought the number of university students to 508,000 in 1981/1982, with the number more than doubling again to 1,175,000 by the end of the last century (NCERD 2001). In 2007/2008, there were more than 1,386,000 students studying in public universities in Egypt (MoE 2008). Upper-intermediate institutions had about 21,000 students in 1973, increasing five-fold to about 105,000 in 1989 (Richards 1992), and continued to grow, though

at a slower pace, to about 164,000 students in 2006/2007<sup>3</sup> (Hozayin 2007). Current policy foresees the continued expansion of higher education enrollments. Currently about 30% of young people, 18–23 years of age, are enrolled. The Ministry of Higher Education has set a goal of 40% of young people to be enrolled by 2022 (Helal 2007).

Substantial changes were also taking place in the secondary school system. At the time of the 1952 Revolution secondary school students were overwhelmingly in the general/academic secondary track that prepares students for university; just 16% of the approximately 115,000 students then enrolled were in technical schools (Szyliowicz 1973). Following the Revolution, technical education was upgraded, its curriculum updated, and its schools formalized so that it could become a cornerstone of technological development and economic growth (Metwalli 1989). By 1960, the shift to technical education had begun: with more than 40% of secondary students in the technical track. With plans for industrialization, the opening of job opportunities in the new factories, and the imminent expansion in cultivable land resulting from completion of work on the High Dam, opportunities for graduates of technical schools were expected to grow, and technical education received special attention in the first Five-Year Plan (1960–1965) (Research Project 1963). By the late 1960s, as total secondary school enrollment approached 300,000, technical education had come to dominate: less than 20% of all secondary school students were then in the general track (Antoninis 2001; Szyliowicz 1973). However, the government's economic and development plans stalled and it failed to launch the second five-year plan. As a result, the overwhelming dominance of technical education was relatively short-lived (Waterbury 1983). The following years witnessed the downsizing of the public sector and the privatization of many companies. By the early 1990s, the government moved away from a centrally managed economy and abandoned its role of providing long-term, secure government employment for higher education graduates. Graduates of technical education, particularly female commercial school graduates who had been recruited for clerical positions in the public sector, were among those now facing unemployment (Assaad 1997).

Even as the balance in secondary school enrollment began to shift back toward general secondary, however, still, in the late 1990s, technical students constituted about 65 to 70% of all those enrolled in secondary school (Antoninis 2001; NCERD 2001). As of the 2005/2006 school year, with almost 3.5 million students in all types of secondary education,<sup>4</sup> approximately 56% of secondary students were in public technical schools (Hozayin 2007). Current Ministry of Education policy dictates that during the planning period from 2007/2008

through 2011/2012 the number of students in general and technical secondary will be brought into balance (MoE 2007).

Although technical education expanded tremendously during the post-revolutionary period, it also confronted many problems. Even in the early 1990s when technical education was still near its peak, it was recognized that technical schools provided low-quality education and attendance at these schools was considered low-status (Richards 1992). Now the poor quality of technical secondary education is widely accepted (MoE 2007; World Bank 2007), as is the view that technical education fails to prepare young people for the labor market they will face after graduation (MoE 2007).

While the guaranteed employment scheme remained viable and as technical education grew, technical secondary became an appealing destination for, and raised the aspirations of, students from poor families. Graduates of technical education could earn the income and respect of employment in the public sector and join the middle-class salariat. Now, however, although the government still employs a large number of technical school graduates, it has greatly reduced its role in providing long-term employment for new entrants into the labor market. The private sector has not stepped in to fill the gap. Moreover, with their limited skills and outdated knowledge, technical school graduates are said to be ill-prepared for the demanding and competitive private labor market (Richards and Waterbury 1996). Despite these problems, the government continues to channel students to the technical track and public demand for this type of education has not ceased.

During this era, general secondary expansion benefitted some disadvantaged groups. By the late 1960s, however, the poor were becoming increasingly aware that general secondary and university education was not for them (Ayubi 1980). To this day, those who go to technical secondary schools continue to be disproportionately poor (World Bank 2007).

### **Theoretical Discussion**

Some assume that the results of the exam at the end of preparatory (middle) school determine the type of secondary school a student will attend (MoE 2007; World Bank 2007). Others recognize that some capable students, whose scores qualify them for general secondary admission, choose instead to go to technical secondary (Antoninis 2001; MoE 2008). This question of decision making at branching points is the subject of debate between rational choice theorists, on one side and cultural theorists, on the other.

Rational choice theorists (Boudon 1974; Goldthorpe 1996) see educational decisions as a sequence of events. There are primary effects of class culture and inequalities in the early

stages of education; these affect students' performance, but not their aspirations. At later stages, secondary effects come into play at branching points when rational choices are made on the basis of parents' and students' evaluations of benefits and costs, constraints and chances of success; students make different choices appropriate to their class positions (Boudon 1974). For example, middle-class families, with a stake in maintaining their social status, are concerned about the possibility of downward mobility and are keen on maintaining class stability. They also have the advantage of being equipped with both cognitive knowledge of the educational system and the financial resources to implement their aspirations. They are thus able to help their children make the "right" choices. On the other hand, students from working-class backgrounds, even those capable of continuing their education, may choose to skip general secondary and university because they are not concerned about protecting their social position. Moreover, technical education may improve their social status and employment possibilities and provide a chance for upward social mobility. But more importantly, the poor are concerned with calculating the subjectively expected utility of university education—that is, the costs of university education versus the expected social and monetary return (Becker and Hecken 2009). Thus, they may opt for vocational education or an apprenticeship with direct access to the labor market rather than a more theoretical university education and the uncertain prospects of white-collar employment (Becker and Hecken 2009). For example, studies in Germany have shown that students from working-class backgrounds who have the possibility of continuing in university after their vocational degree still often select the vocational track because it offers attractive options for work, which, although yielding lower returns on education, entail fewer risks and provide more security (Hillmert and Jacob 2002). In sum, rational choice theories are usually associated with the calculation of costs and benefits and gain maximization. They imply a choice between alternatives and assume the exercise of power that enables a choice to be made.

Cultural theorists (Bourdieu 1977; Bowles and Gintis 1976), on the other hand, find decision making to be rooted in the internalization of class cultures and in the role of educational institutions in sustaining the advantages of the middle-class and reproducing disadvantage. Bourdieu has designated "habitus" as a set of internalized dispositions or a sense of limits that adjusts one's personal aspirations to one's objective situation in life. In particular, "family habitus" for Bourdieu mediates between individuals and the social world, setting the limits on what is possible and achievable. By constructing and classifying the social world and making some choices seem like they are the only option to be taken, the

family contributes to stabilizing the social order. Decisions, according to Bourdieu, are devoid of any strategic design; they are governed by a “practical sense” that “reads” the future that fits the individual, that is made for her/him and for which s/he is made. The social context, inculcated by habitus, not only directly shapes the capacity of individuals to access certain outcomes, but also limits their ability to imagine other outcomes and to determine whether there are other legitimate or worthwhile pursuits (Young 1999). Gambetta (1987), in his study of Italian working-class families, has pointed to “inertial forces” that sometimes lead to “over-adaptation” on the part of working-class families to the realities of their class situation, causing them to miss opportunities, “short-circuiting” themselves and their children. Similarly, Hatcher (1998) has found that it is not uncommon that individuals exercise self-selection, withdrawing from competition, and curtailing their chances for advancement.

Whatever the reason students in Egypt attend technical secondary education, this step “practically determines their later life chances” (World Bank 2007, 17). While almost all general secondary graduates go to university, for almost all students in technical secondary this is a terminal degree. Upon graduation most enter the labor force. Though not impossible, it is very difficult for technical secondary graduates to enter university.<sup>5</sup> In addition, a few technical school graduates continue in upper-intermediate education (Antoninis 2001). Indeed, the policy of expanding technical secondary education in the 1980s was implemented specifically to ease the demand for university places (Acedo 2002). Since all general secondary graduates were guaranteed a place at university and secondary education was expanding rapidly, the pressure for university admission would have become unsupportable without a mechanism to provide students with secondary education, but exclude them from qualifying for university. Tracking students into technical secondary became this mechanism.<sup>6</sup>

Others have observed that education policies like those implemented after the 1952 Revolution, though intended to increase equity in higher education, have generally failed. Indeed, such policies mainly benefit those who are better-off (Halsey, Heath, and Ridge 1980; Lewis and Dunder 2002). Raftery and Hout (1993) have formalized this idea with the theory of Maximally Maintained Inequality, which states that elimination of fees and expansion of places will not, in general, lead to greater equity in educational attainment. Until those from well-to-do families saturate their demand for a level of education, the relationship between family background and educational attainment tends to remain stable. That is, the children of well-to-do families will be the most likely to occupy the new university places

created. Enrollment of children from poorer families will begin to catch up after all the children of the well-to-do who want to go to higher education have enrolled (Raftery and Hout 1993). Indeed, in the early stages of change, the gap in attainment between rich and poor may grow (Halsey, Heath, and Ridge 1980). Others have shown that even as secondary education expands and wealth differentials in access to and completion of secondary school shrink, tracking can maintain wealth differentials in secondary schooling and preserve the dominance of the well-off in higher education (Arum, Gamoran, and Shavit 2007; Jao and McKeever 2006). In Egypt it has been observed that tracking during secondary may exaggerate educational disparities, but “conclusive evidence . . . is lacking” (World Bank 2007, 28). In recent years, new quantitative data has become available that allows us to examine how wealth affects tracking in secondary and how tracking affects the transition into higher education. Qualitative data allows us to examine decisions about the choice of secondary school track.

### **Data and Methodology**

We use data from the 2006 Egypt Labor Market Panel Survey (ELMPS06) to explore educational transitions. We focus on specific age groups (15–19 and 19–23) to look at conditional transitions into and through secondary and higher education. We use conditional transitions to control for differentials in completing the early stages of education and age groups that are appropriate for each level of transition. We consider wealth effects at each transition. At the transition from secondary to higher education we focus particularly on the type (track) of secondary school attended. Once we have demonstrated these transition differentials, we use qualitative data to guide our discussion of the decisions that influence these transitions. The qualitative data is based on interviews with 120 technical school graduates (primarily women, but including a few men), aged between 20 and 60. In this paper we focus on the responses of the younger women and men, aged 20 to 35 who graduated from the commercial branch of the three-year technical secondary education.

### **Results of the Quantitative Study**

We begin by showing that the poor are much less likely to have completed preparatory school than are the wealthy, with a strong monotonic trend across the wealth quintiles (see Table 1, column 2). This is largely because there is a very strong relationship between wealth and ever-enrollment<sup>7</sup> in school. Subsequent transitions through primary and into and through preparatory also favor the wealthy, but to a much lesser degree (Langsten and Hassan 2009).

Earlier work has also shown that the wealth differential for the transition into secondary is small (Langsten and Hassan 2009). This is confirmed by the modest difference between the poor and the wealthy in the percent of preparatory school completers who fail to enter secondary (see Table 1, column 3). This cannot, however, be interpreted as reflecting socioeconomic equality in the transition into secondary school. Inequality is maintained by tracking poorer students into technical secondary, while wealthier students overwhelmingly go to general secondary (see Table 1, columns 4 and 5).

**Table 1. Preparatory School Completion and Entry into Secondary School (among Those Who Have Completed Preparatory), by Wealth Quintile, Young People (15–19 Years), Egypt 2006.**

| (1)                      | Completed Preparatory<br>(2) | Type of Secondary Attended |                  |                |
|--------------------------|------------------------------|----------------------------|------------------|----------------|
|                          |                              | None<br>(3)                | Technical<br>(4) | General<br>(5) |
| Poorest Quintile         | 44.9%                        | 6.9%                       | 68.5%            | 24.6%          |
| 2 <sup>nd</sup> Quintile | 60.5%                        | 5.6%                       | 58.9%            | 35.6%          |
| Middle Quintile          | 65.3%                        | 3.8%                       | 58.0%            | 38.3%          |
| 4 <sup>th</sup> Quintile | 78.4%                        | 3.2%                       | 44.0%            | 52.8%          |
| Richest Quintile         | 87.4%                        | 1.3%                       | 23.4%            | 75.4%          |
| Total                    | 65.8%                        | 3.9%                       | 48.3%            | 47.9%          |

A high percentage of those students 19–23 years of age who entered secondary will complete that level, irrespective of family wealth (see Table 2, columns 2 and 3). This is especially the case for technical secondary where the wealth gap in the percent completing is less than 6 percentage points. The variation in the likelihood of completing general secondary is much greater, with the poor being particularly disadvantaged: just 75% of students from families in the poorest quintile complete general secondary, while around 90% or more of students in all the other quintiles do so (Table 2, column 3). Interestingly, among students from the poorest quintile, those in general secondary are more likely to drop out than are those who follow the technical track. Among students from the richest quintile, on the other hand, the relationship is reversed. Students from families in the richest quintile who entered technical education are somewhat more likely to leave school than are rich students who attend general secondary.

**Table 2. Secondary Completion and Entry into Higher Education (among Those Who Have Completed Secondary), Young People (19–23 Years), Egypt 2006.**

| (1)                      | Completed Secondary |                | Type of Secondary Attended |                           |                   |                         |                           |                   |
|--------------------------|---------------------|----------------|----------------------------|---------------------------|-------------------|-------------------------|---------------------------|-------------------|
|                          | Technical<br>(2)    | General<br>(3) | Technical                  |                           |                   | General                 |                           |                   |
|                          |                     |                | Type of Higher Attended    |                           |                   | Type of Higher Attended |                           |                   |
|                          |                     |                | None<br>(4)                | Upper-Intermediate<br>(5) | University<br>(6) | None<br>(7)             | Upper-Intermediate<br>(8) | University<br>(9) |
| Poorest Quintile         | 87.1%               | 75.0%          | 98.9%                      | 0.7%                      | 0.4%              | 14.0%                   | 12.3%                     | 73.7%             |
| 2 <sup>nd</sup> Quintile | 92.2%               | 90.7%          | 95.8%                      | 4.2%                      | 0.0%              | 8.2%                    | 15.0%                     | 76.9%             |
| Middle Quintile          | 93.2%               | 88.3%          | 94.2%                      | 4.4%                      | 1.5%              | 9.1%                    | 14.3%                     | 76.6%             |
| 4 <sup>th</sup> Quintile | 94.4%               | 96.7%          | 89.9%                      | 6.5%                      | 3.6%              | 5.1%                    | 19.2%                     | 75.8%             |
| Richest Quintile         | 92.8%               | 96.1%          | 78.4%                      | 12.4%                     | 9.2%              | 1.9%                    | 7.6%                      | 90.5%             |
| Total                    | 92.0%               | 93.1%          | 92.4%                      | 5.2%                      | 2.4%              | 5.1%                    | 12.6%                     | 82.3%             |

We noted in the introduction that the type of secondary attended largely determines a young person's chances of attending higher education. The ELMPS data confirms this observation. Among students 19–23 years of age who attended general secondary, 82% continued their education at university, while just 5% left school. Among those in this age group who attended technical education, 92% left school after completing secondary and just 2.4% managed to enter university (see the Total row in Table 2). Another interesting point to note is that, although upper-intermediate is sometimes seen as a higher education alternative for those who attended technical secondary (MoHE 2007), among students 19–23 years of age who entered upper-intermediate education, 64% came from general secondary. Thus, whether one considers university, or even upper-intermediate, there can be no doubt that tracking in secondary is the overwhelming determinant of future education chances.

Although the secondary track attended is the main determinant of future studies, among graduates of a given secondary track significant wealth differences remain. Among

technical students from the poorer 60% of families (poorer three quintiles), 94% or more stop their education at the end of secondary and almost none go to university. On the other hand, 9% of technical students from families in the richest quintile manage to enroll in university and only about 78% leave school after completing secondary. Among general secondary students, those from the richest quintile again stand out. 90% go to university and fewer than 2% terminate their education. In all the other quintiles, only around 75% of general secondary graduates go to university, with a slight tendency for those from the poorest quintile to leave school, while those from the second, middle, and fourth quintiles are more likely to enroll in upper-intermediate.

Once students enter higher education, they tend to complete their degree. By the age of 24–29, 93% of those who entered both upper-intermediate and university have graduated. Moreover, wealth differentials in higher education dropout rates are small. Among university students, those from the poorest quintile are slightly more likely to drop out, while, interestingly, just as with technical secondary students, among upper intermediate students it is those from the wealthiest quintile who have a slightly higher likelihood of quitting. Overall wealth effects on higher education dropout are not statistically significant.

Given this situation, the question arises: To what extent is the decision to attend technical education driven by exam results, or is there also a component of habitus or of rational choice? That is, do some students who achieve scores that qualify them for general secondary decide to forego that opportunity and voluntarily enroll in technical secondary? And, if so, what are the underlying reasons for this decision?

### **Qualitative Results**

The respondents in the qualitative part of the research were mostly from working-class backgrounds in which fathers were generally uneducated or barely literate and mothers were mostly illiterate housewives. The average number of siblings was four. Almost all siblings went to free public schools, but differed in the level of advancement and completion. They include those who dropped out after a few years of primary or preparatory schooling as well as a few who went to university or are still studying there. However, the majority were students or graduates of technical education. Among the pool of 120 graduates of technical schools interviewed, only two—a man and a woman—were in university.

The educational trajectories of the families of this study's participants are mixed. For example, in one family of nine children four of the girls had a commercial diploma, one girl dropped out after fourth primary, two girls could barely read and write, one boy finished

general secondary school, and one boy only, the youngest, went to university. He studied law for two years, then failed three successive years, and dropped out.

In general, most of the participants enjoyed their parents' support at least through the nine years of compulsory education. Parents encouraged their children to seek an education because of a desire to provide them with a good life and the possibility of material comfort. Parents wanted to protect their children from the deprivation they had suffered, allowing their children to achieve what they, themselves, could not. Girls as well as boys received support, which reflects the finding that in Egypt girls who enter school are as likely as boys to complete secondary education (Elbadawy 2006; Langsten and Hassan 2009).

There is one central subject that appears repeatedly in our interviews and that is a crucial factor in determining students' performance and consequently, their success in education—private lessons (tutoring). After the compulsory primary stage, continuing on to the other levels of education is based on obtaining high scores on qualifying examinations. This generally requires private lessons. As a result, tutoring has proliferated in recent years. Private tutoring now represents the largest household education expense constituting a significant part of total household spending: up to 28% of families' educational expenditure (UNESCO 2008). This means that children of well-to-do families have a better chance of succeeding.

Elbadawy et al. (2007) have shown that there are no gender differentials in private tutoring, and an earlier survey showed that families of preparatory school students were more likely to invest in private tutoring for their daughters than for their sons: 75% of girls and 59% of boys received tutoring (El-Tawila et al. 2001). According to Lloyd et al. (2003) school dropout rates for girls did not appear to be influenced by the family's socioeconomic status, unlike the case of boys where the family's economic conditions and educational status affected the decision to drop out.

Private lessons are required for passing the crucial examinations and moving up the educational ladder, but they are also a means to pacify teachers who in their endeavor to augment their low salaries put pressure on (and sometimes even blackmail) students to take private lessons with them. Without private lessons, the risk of failing is high. According to one survey, almost 60% of the students felt teachers treated them preferentially, with 25% attributing this to whether or not they took private lessons with the teachers (El-Tawila et al. 2001).

When private lessons are used as a substitute for formal schooling they may improve scores, but they may not necessarily improve learning. Students may pass their school year, but their actual educational performance and attainment, in the medium and long run, may be

quite modest and they may ultimately end up repeating school years at later stages especially if for financial or other reasons they are unable to sustain their private lessons during one particular year. According to Birdsall and O'Connell (1999) poor levels of basic literacy and mathematical skills as well as higher-grade repetition rates have been observed since the 1980s.

In analyzing decision making, we must first recognize the complexity of trying to differentiate between the reasons for not attending general secondary, which are: 1) individual abilities; 2) financial constraints; and/or 3) school environment. All three sets of factors are closely related. With this in mind, one thing is clear—most technical secondary students effectively had no decision to make about the type of secondary school attended. About two-thirds of the respondents performed poorly in their preparatory school exams and could only follow the technical track. Many of these participants say they worked hard, but were not able to achieve a score that would qualify them for general secondary. However, even among students who failed to qualify for general secondary, some did not have general secondary as a goal. These participants claimed they got low scores because they could not or did not work for admission to general secondary, or general secondary simply never entered into their thinking. A separate group, about one-third of participants, got scores that qualified them for admission to general secondary, but decided not to follow this track and opted for technical secondary.

In examining the results of the qualitative study below we present two types of students: 1) those whose school scores and performance did not qualify them to join the general secondary stream and 2) of more relevance to this paper, those who were qualified to enter the academic stream, but decided not to. We further subdivide the first group into: a) those who did not aspire to general secondary and b) those who aspired and worked for it, but who got low scores nonetheless.

### ***The First Group: Those Who Did Not Qualify***

#### **a) Those who expected to follow the technical track**

A few students who got low scores on the preparatory school leaving exam did not aspire to qualify for general secondary. For them, conditions made the prospect of general secondary undesirable or impossible.

For example, when K. (32) was young he had a promising future. He had ranked third in his governorate in the examination at the end of primary school. But when his father had a major accident that left him crippled, K. stepped in to replace him. To support his mother and

two sisters, K. started to work at the age of twelve as an assistant bus conductor. His whole life took a different turn from that time on. Only with difficulty was he able to obtain scores that qualified him to get into an industrial school and complete his technical secondary diploma, after which he took up a job in a garment factory.

The school experience reported by some participants in this group pointed to a largely unregulated system of education that not only made the daily routine of going to school quite unpleasant, but also fueled the desire of both students and families to speed up the process and find shortcuts in order not to stay in school longer than necessary. B. (25) says:

The year I failed in my first prep was not my fault. They had told me the final exam was on Saturday, but it was actually on the Thursday before. When my mother found out by chance from a neighbor, she woke me up in the morning and pulled me by my hair so I could go to the exam. It was Arabic and handwriting. They allowed me to sit for the handwriting test and not the Arabic. Of course I failed. And when I sat for the re-exam later, they failed me completely. The school could have done something and they could have allowed me to sit for the exam the first time, but they did not.

B. lost interest in her studies and during the remaining two years of her prep school made no special effort to obtain high scores to get into the general track.

G. (33) was not a good student during her early school years. In the last year of her prep school she passed with the help of her class teacher/private tutor, but the results barely qualified her to get into the technical track. She explains:

My mother found a teacher to give me lessons and let me pass. But I quarreled with the teacher and I had to re-do the exam. But we were used to spending the summer holiday in our village and that meant that I had to stay behind to study and keep the whole family from going to the village. But I had to do it. On the exam day my mother went to talk to the teacher. He told her to give him EP [Egyptian Pounds] 60 so he would make me pass without sitting for the exam. But I was very anxious and went anyway on the exam day. As soon as he saw me, he said: "What are you doing here? You have already passed." He just wanted to see my face and take his EP 60. He took my name and prepared an answer to the exam in my name.

In some cases, the experience of older children sent messages to younger siblings that influenced their decision to "choose" the easier technical secondary. They adjusted their study level during preparatory school to obtain only the (low) grades that qualified them for technical schools. For example, among this group, there was a general understanding that rampant unemployment has left its mark on everyone, including university graduates. On one

hand, this served to “reassure” students that they would not be alone to suffer unemployment and defused their expectations about work. On the other hand, the uncertain rewards of higher education discouraged them from seeking admission into the general track. Judging from the experiences of older siblings who had university degrees, but failed to obtain decent jobs, they realized early on that as the labor market seemed bleak, their chances were not high. Z. (29) was discouraged by the unemployment of her male siblings who graduated from university and chose to adjust the level of study in her first year of prep school to take the easier route of technical education. In retrospect she says:

My eldest brother [university graduate] works in Libya. It is certain that he would not find a job here if he finally decided to return. My other brother found a job by coincidence because my father, who was still alive at the time, applied on his behalf in the railroad authority. My youngest brother went to Yemen after he obtained his BA in 1989, although Yemen is not a beautiful country and they don't give good money. My younger brother Adel who studied sociology works now as an office boy in a government office. When I am sad, I remind myself that there are plenty of university graduates who cannot find work.

In another case, D.'s trauma with the *thanaweya amma*<sup>8</sup> and the fact that even after studying very hard she still failed, had a negative impact on her younger brother. He decided to avoid the general track and focused his energies on obtaining just the scores that would send him to the technical track. He says:

My sister who killed herself studying did not get good scores. What about me? I am not ready to repeat this experience and waste years of my life. I do not want to be like her. I had two choices: either to obtain high scores and get into university or get sufficient scores and go to industrial technical and I chose the latter. I chose the shortcut.

b) Those who aspired to qualify for general secondary, but failed the examination

A larger group of the participants had aspirations to join the general track, believed they had worked hard to achieve that goal, and expected to qualify. But in the end, their scores were low and they were relegated to technical education. The performance of some of the students has been consistently poor, as one could understand from their stories, but they misjudged their abilities and still aspired to join the general track. They blamed circumstances “beyond their control” exemplified by statements such as: “The problem was not with me, but with the teachers; they failed me because I did not take private lessons with them; I had to pay them

money in order to pass.”

There was also the tendency to personalize the educational system by linking macro changes, such as cabinet reshuffles and appointments at the ministerial level, to the ease and difficulty of exams, and therefore to students’ own performance and success in their education. The quotation below illustrates this point:

The exams were very difficult. This was the year of the ministerial reshuffle and the minister of education had changed. I had taken private lessons and I used to study really hard. But a lot of people failed. I failed in the core subjects, which I studied very well, so it meant that I could not continue. My teachers had high hopes for me and used to tell me that I would not get less than 98%. It was a big disappointment.

In other cases, participants fared well during their school years, but for one reason or another performed badly in their prep school leaving exam, and there was a wide gap between the actual exam results, on one hand, and their aspirations and perceived academic abilities, on the other. Some participants said, for example, that they had expected to obtain over 90% in their final grade, but they only scored 50% and insisted that they were surprised by these poor scores. S. (28) described her intense preparations for the exams that resulted in sickness, and then her later disappointment when she still could not obtain the qualifying scores for general secondary:

During the exam month, I studied very hard and slept only four hours every day. I went to see the doctor because of over-exhaustion. My hair was falling terribly; I had black hollows under my eyes and my eye-sight deteriorated. After the results were announced, and I found out that I had not obtained the scores for general secondary, I had a nervous breakdown for a week.

Many attributed their poor performance and subsequent enrollment in technical schools to some incident related to private tutoring. In some cases, because of their parents’ limited financial resources students could not take private lessons regularly. But private tutoring had developed into a profit-making business in which students were bullied and forced to take lessons regardless of their performance. N. (26) had been an average student throughout her school years. In the following paragraph she recounts what happened to her in the last year of prep school:

The teacher beat me for no reason in front of the entire class. When my father went to complain to the headmaster, someone in his office told him, “You may think that this is throwing away EP 30 every month, but just pay the teacher so she can be good to your child and treat her well.” Then I started going to the teacher’s home to take

private lessons. She was bitter all the time. She complained that other teachers in the school had more classes and therefore more tutoring opportunities, and more money. She was assigned only our class and had to make sure we all took private lessons with her. I think I was a good student, but she insisted on giving me lessons.

When the teacher took a maternity leave, N. then lost both her private lessons and her classroom teacher because the school did not provide a replacement. Although she passed her school year, she obtained poor scores that did not qualify her to join the general track:

She [the teacher] was delivering a baby in a few months. I was counting the days before I would not have to see her anymore. But when she actually left to deliver her baby, they left us without a teacher for the rest of the year. I performed poorly in the exams, but then we all passed that year. I don't know how. I don't remember that I learned anything.

Thus, N.'s story shows how a poor school system exacerbated the problem.

Other incidents demonstrate government neglect of schools in poor communities. For example, the rise of elite private schools has encouraged emulation at lower socioeconomic levels. But lacking government patronage and the same amount of resources and strong links with policy-makers, the imitation private schools in poor neighborhoods often had deleterious effects on the less advantaged students. The case of R. (26) illustrates how poor regulation of schools harms students:

After my primary years, I went to a private preparatory school because I failed in my first year of preparatory school [in the public system]. This private school included primary, prep, and secondary stages, but it was not accredited. The principal established a secondary stage without notifying the government or obtaining permissions. I passed my first semester, but in the second semester when they [the government] learned that it was not accredited, they failed us all. I tried to take my papers to any other school, but no one would accept me as I came from an infamous school with a bad reputation. It was at the very end that I was able to get into a commercial school. There were lots of problems.

There are also incidents related to school practices that stigmatized students and served as constant reminders of their economically disadvantaged positions.

Y. (24) is a hard-working student who wanted to study mass media in the university, but she has always had difficulty paying her school fees. She failed to pay them in the beginning of the last year of prep school. The administration constantly reminded her by sending written notices, which were read out loud by the teacher in the class. Even though

she found it humiliating, usually she was not the only student to be reminded. At the end of the year when she still hadn't paid the money, she was publicly singled out and prevented from taking her final exam despite her pleas. It was not until her mother deployed some local contacts who knew the principal personally that he let her in and an agreement was reached that she would pay her fees in two installments. But this settlement happened after Y. had decided to skip many school days in order to avoid embarrassment. This affected her performance and her grades at the prep school leaving exams only qualified her for technical school.

### ***The Second Group: Those Who Had the Choice***

One third of the study sample had fared well in both primary and preparatory schools and had the option to go into general secondary, the formal route to university. Yet, despite this possibility, they decided not to take that option. Families made it clear to children that education was an available option if they wanted it, but it had to be within the parents' financial means and not represent a financial burden on them. In some cases, the child's understanding of a shared responsibility for the family and for equal treatment of siblings put general secondary out of reach, despite a good grade on the preparatory school leaving exam. During our interviews, it became clear that children felt a moral responsibility toward their families, particularly as they went through rough patches. In such situations, following the uncertain path of general secondary and university, or any events that would delay entry into the labor market, was implicitly and explicitly discouraged. The thought of pursuing education or other individual projects would have been selfish and ungrateful. Young men felt it was their "natural" responsibility to support their families realizing that any delay in earning money was a threat to the entire family that could not be afforded.

However, female as well as male children were affected by family responsibilities. Some children knew they had potential and were aware that opportunities might be lost if they devoted themselves to their family responsibilities, yet there was generally no sense of bitterness, but rather a sense of oneness fueled by a common understanding that they were all—men and women—collectively facing a difficult situation. Female participants in this group reiterated that it was not the men's indolence or procrastination in trying to improve their situation that caused their financial problems, but rather circumstances beyond their control that made them unable to take responsibility for their families. To that extent, young people were ready to use all the possibilities their education afforded them to rescue a family

business from going bankrupt or spare their families an undignified life. Often this meant foregoing plans for education.

In several families, both male and female children worked together to save the household. When L.'s father died prematurely at the age of 38, he left a carpentry workshop and eight children: three boys and five girls. His eldest daughter was only fourteen and the youngest son was six months old. The family tried to get workers to run the shop, but did not succeed and they were losing money. Eventually they had to sell the workshop. The eldest daughter, who was in the preparatory stage when her father died, gave up her education and started work in a garment factory. Not much later, another one of her sisters joined her. Now that his sisters had taken that step, A., the eldest among the boys, felt it was his responsibility too as a man to support his family, so he too dropped out of school. Family responsibilities were indeed daunting. L.'s mother had to send one of her daughters to live with her paternal aunts in Alexandria. The aunts took care of the girl and gave her education until she got her commercial diploma and they married her off in Alexandria. L. too was sent to live with her aunts, but could not stay away from her mother and was brought back to live with her family.

As the five older siblings now brought home income from their various jobs, the four younger children, including L., were able to complete their prep education with good grades. L. explains: "Mother was very pleased at our success and diligence. I don't remember that she ever had to tell us to study or do our work. I used to come home after school and do house chores with S. [younger sister] and sometimes H. [younger brother] also helped." In particular, L. was a very good student and had plans to join the general track and study law in the university. But because of her family circumstances, she had to take the commercial diploma route like her siblings, to the dismay of her teachers who had high hopes for her. In this and many other cases, the choice of the technical track is derived from moral obligations toward the family and the need for equality among siblings. L. said:

We all understood that no one should say they wanted to continue their education. We all went to technical education so we would all be the same and equal. My mother gave us the choice and said we could go to university if we wanted, but that she was not going to be able to support us there, so we chose technical education.

In a similar case, when O.'s mother died, her two older sisters were married and she was the oldest among the children still at home. She had been doing well at school and her prep school scores qualified her to enter general secondary. But it was understood in her family that she would stay home first to take care of her sick mother and then when the mother died, look after her younger siblings. She did not even remember that this was a

subject of discussion. She stayed at home until her siblings were old enough to look after themselves. Then she looked for a job to help her father support the family. General education became an impossible goal. It was even almost serendipitously that O. managed to obtain her commercial diploma. At work, she told her boss that she wanted to continue her education. He encouraged her and brought her books. He used to help her with her studies and also asked her colleagues to help her each according to his/her specialization. She obtained her commercial diploma following the flexible system that did not require daily attendance.

In a third case, N.'s mother took responsibility for her five children when her husband decided to leave his work and family in Cairo and migrate to Iraq where he took up a job in construction. N. recalls that they did not hear from her father for months and the little money that he had left them was gone. Her mother had to go out to work selling vegetables at the street corner. For N. and her siblings the situation was so dire that their main concern was to obtain only the level of education that would enable them to gain their livelihood. Three of the five children, including N., were qualified to go into the general secondary stream, but all five children had received technical education or are still in technical schools, combining school with work to earn a living.

At the end of the preparatory stage when students have to choose the technical or general education path, parents have to demonstrate again their readiness to support their children's educational choice. Parents' pledge of support requires not only special financial arrangements for private tutoring, but also a decision on the part of the entire family that they are psychologically ready to go through this sometimes onerous and tense process. As students transition into preparatory school, for some their fear of general secondary education mounts. F. (27) was a good student whose grades qualified her to get into general secondary. But this is how she and her family felt about the general secondary stream:

My family wanted me to go to general secondary. But we all knew that it was very tough and needed hard work and a lot of study. We heard in the papers that people commit suicide. I didn't want to go through a depression or have a mental breakdown. It was much easier to go into technical education.

Some young men and women lacked confidence that they were fit for and could successfully go through the general academic education process. R. (21) explains that she had scored well enough to get into general secondary and actually submitted her papers to the competent educational directorate to begin the application procedures. But on the following day, her father went to the directorate and withdrew her papers. He was concerned that the

whole family would not be able to deal with the general secondary stream, that his daughter was too weak to deal with *thanaweya amma*, and that she might be out of her depth in the academic stream. He spoke of general secondary education as an intimidating stream and a place not fit for people like them. R., and other women like her, associated entry into the general secondary stream with personal traits and physical abilities that they claimed they did not have. They described themselves as “fragile,” “vulnerable,” and “not tough enough” to study in the general stream:

Father sat down with me and we discussed the matter calmly. He said that *thanaweya amma* was not for people like us and we would not be able to handle it. And he was right. This is exactly what happened to me in prep school. I got really sick before the exams and was scared to death. He said that on the other hand, if I went into the commercial school, my brother, who had just obtained his commercial diploma, would help me with my studies, unlike *thanaweya amma* in which we knew nobody. I never regretted that because I see what happens to people when they do their *thanaweya amma*.

Most respondents described at length their fear of specific academic subjects, particularly foreign languages, and how decisive the struggle with curricula was in determining their choice to take the easier technical route despite their qualification to enroll in general secondary. The inability to deal with a specific academic subject starts early in life and, without proper intervention, grows. This illustrates both the failure of the education system and also families’ sense of helplessness and lack of proper intellectual and other resources to deal with such problems. Learning foreign languages is especially difficult because it is not present in the social sphere of most of the participants; they do not use it in their daily interactions. In fact, most shared their fear of the English language. In the following lines, G. (24) described her and her siblings’ struggle with English; for her, it started as a small problem, but developed into a major constraint that forced her to completely change her trajectory:

I had the choice to go into general secondary, but did not want to do the *thanaweya amma* because I had developed a complex about English as a subject. I was fine in all the other subjects except English. I always found it difficult. As a child, I had attended schools that paid no attention to English....It was introduced as a main subject in first prep and I was totally lost. But because the school teachers and management knew my family, they let me pass and I got to third prep not knowing what to do with English and not being able to make a sentence in English, but my good grades in the other

subjects made up for this deficiency. I tried everything: private lessons and group tutoring. None of my siblings managed English either. I had to go to a commercial school because at least there my problem with English would be defused a bit because I could focus on more important subjects related to my major.

It is also common for students to change paths from general to technical education (a practice called *tahweel massar*). Some participants reported that in their schools the students from as many as five out of nine classes shifted from the general to commercial track. Students would enter the general secondary stream and try it for a while, find it difficult and leave it to go to the easier technical track. M.'s (21) family did not interfere in her decision to go to general secondary, but when she decided to leave it, they were relieved:

I spent my first and second year there. I thought I was doing my best, but was constantly scoring badly. I did not want to continue and told them at home I wanted to change to commercial education. They all thought it was a good idea and immediately on the following day my mother pulled my file from the school.

Once they shifted to commercial education, the women in the sample fared well; not only was the curriculum much easier, but the entire atmosphere was more relaxed and less competitive. For a while, they also enjoyed preferential treatment from teachers as their sheer acceptance into general secondary education was a proof of their privilege. Unlike others who had no choice but to pursue the technical track, they, at least, had had the choice to try general secondary.

However, for the school administration, young women who changed from general to commercial tracks posed administrative problems as it meant that they had to find additional places in the already crowded schools. Instead of celebrating that “brighter” students were joining the commercial track, administrators rebuked those who had transferred for not realizing earlier that they were not good enough for general secondary. A school principal told one of these girls: “Why be arrogant and insist on general secondary when you know that you would not be able to cope with it? Why not choose the easy road from the beginning?”

## **Discussion**

Previous work has shown that in order to improve equity of access to higher education it is necessary to deal with wealth disparities that begin with the failure of the poor to enroll in school in the first place (Langsten and Hassan 2009). After enrollment, wealth disparities are small until the transition from preparatory to secondary school. Although the overall likelihood of enrolling in secondary does not vary greatly by wealth, there are huge wealth

disparities in tracking. The poorer a student is, the greater the likelihood that s/he will go to technical secondary school. As wealth increases, the chances of attending general secondary increase as well. And, in Egypt, in the transition from secondary to higher education, despite some continuing wealth effects in which the wealthiest quintile tends to stand apart (see Table 2), tracking truly is destiny. Most of those in technical education will leave school upon completing that degree. Those in general secondary overwhelmingly continue their studies in university.

Examinations at key educational transition points are used to place students in the next educational level. Given the importance of general secondary education, it is commonly assumed that the decision to go to general secondary depends solely on the score received on the preparatory school leaving exam. Our qualitative results show, however, that this is not always the case. Some students whose scores qualified them for general secondary made a decision to attend technical secondary instead. And even among the students with low scores, and who therefore had no option to attend general secondary, there were some who decided, or simply came to accept, during preparatory school or even before, that they would not be able to attend general secondary. Therefore, these students did what was required (sometimes with great effort) to complete preparatory education and get a score that would allow them to continue their education in technical secondary.

We have organized our analysis of decision making about the secondary school track to attend around a typology distinguishing between those who had no choice but to follow the technical track and those who could have gone to general secondary. One might assume that those who failed the exam lacked the cultural capital to succeed in education, while those who attended technical school despite qualifying for general secondary made a rational choice to do so. Our qualitative data suggests, however, that the reasons for attending technical secondary were much the same irrespective of the timing of the decision and whether it was voluntary or not. It is not true that those who had the choice to go to general academic education were all constrained by their family circumstances or fear of the *thanaweya amma*; often they too were stigmatized and felt that general secondary and university education were not for “people like them.” It is also not the case that those who were forced to take the commercial school route were not influenced by the national fear of the *thanaweya amma*, the cost of tutoring, or the perceived lack of future work opportunities. Members of all groups were confronted with difficult family circumstances that prevented them from obtaining the tutoring required to qualify for general secondary or caused them to worry about the prospects of the tutoring necessary to succeed in the general track. Equally,

members of all groups mentioned being intimidated by the prospect of the *thanaweya amma* and the fact that most students in general secondary came from families with a different social status.

We believe that the difference between the primary (class culture and inequality) and secondary (assessment of costs and benefits) effects on education decisions are not as clear-cut as Boudon suggests. Rather than looking at educational decisions as steps with each step entailing different options and with decisions at branching points open to more choices, we have demonstrated that decisions at later points are largely governed by the deliberations of the entire family, which in turn is cushioned in structural forces of financial constraints and decisions made at earlier stages. We cannot start discussing educational choices without understanding the structural reasons of constrained economic resources. We are reminded of the constraints that lack of economic resources can impose on families and that without resources there can be no real strategies. We should avoid using excess rationality and reading more calculation into educational decisions than what is present in reality, as often decisions are based on practical reasoning. Rational and economic calculations are socially embedded within the family and should be considered a combination of different kinds of rationalities plus fortuitous and haphazard acts. Some decisions are made for reasons other than to achieve advantage. Cost effectiveness and utility are important, but they are not the only criteria to be taken into account. Decisions at branching points (e.g. technical vs. general secondary) are indeed times for family deliberation. They involve rational thinking governed by economic constraints, but are, in addition, conditioned by “inertial forces” that internalize class position. As Hatcher (1998) states, it is not useful to “counterpose” rational choice with class culture. Rational decisions are themselves shaped by the cultural milieu people are a part of.

Notwithstanding the recent changes in the dynamics of the labor market, the legacy of state employment has remained ingrained in the minds of poor families. A diploma from a technical school certifies completion of twelve years of education, an achievement that has special meaning for students from poor families. In the past, technical education guaranteed meaningful employment with good remuneration. It was a crucial point of class demarcation and a statement that its holders had made it to the periphery of the middle class. This is no longer the case. We are currently witnessing the last cohorts of those who gained secure, permanent public-sector employment with just a technical education. With their retirement, a chapter on the role of the state in engineering social mobility will close. The absence of the state’s supporting role, limited opportunities in the private labor market, and the great

distance between technical education students and university has placed the students in a limbo and closed off avenues to social mobility. These developments are also reinforcing the association between poor families and technical education. Poor students can aspire to go to university, but if they fail, they still have the option of technical education. It has become their sanctuary.

## **Conclusion**

There is a fundamental contradiction in Egypt's current educational policy. The basic policy has been to increase equity in access to higher education. During the 1960s and 1970s a number of egalitarian policies were put forward including expansion of the number of places in Egyptian higher education, and particularly university. At the same time, the quality of education deteriorated, requiring a heavy investment in private lessons for those aspiring to general secondary and university education. These costs were beyond the means of the poor. In addition, the poor were alienated from the social norms of most of those attending general secondary and university. Expansion of technical secondary, which disproportionately absorbed students from poor families, was meant to provide government employment opportunities and a chance for a middle-class life for those who could not qualify for general secondary and attend university. However, as opportunities for permanent, full-time government jobs have evaporated, technical secondary no longer provides the prospects it once promised. Since technical education virtually excludes students from the possibility of a university education, it effectively diverts them from any higher education, and works against the goal of greater equity.

Current policy is to push toward a balance between technical and general secondary enrollments and to expand the proportion of young people who attend university. But, just as previous expansion of higher education has failed to bring equity of higher education access (Cupito and Langsten 2011), the additional planned expansion may also fail. Currently, the vast majority of general secondary school graduates (82%) attend university. Therefore, in order to continue to increase the proportion of students going to university it will be necessary to expand the pool of technical secondary graduates who are eligible for university admission. Achieving balance between technical and general secondary would accomplish this goal. The question is: Who will fill these additional places? In order to move toward equity in higher education access, it would be necessary to provide better quality general secondary education for students from poorer backgrounds. However, currently about 23% of preparatory school completers from the richest quintile receive technical schooling; about

44% of students from the fourth quintile do so. Whatever method is used to fill the additional general secondary seats, the maximally maintained inequality theory predicts that students from these well-off quintiles, who have not yet saturated their demand for general secondary education, would gain disproportionately. This effect is further exaggerated because even qualified students from the poorer quintiles are disproportionately likely to choose to go to technical secondary.

A policy that seeks greater equity in university access will have to address not only the number of seats available, but also the financial and social reasons that cause poor students to shun general secondary, the *thanaweya amma*, and university education. These policies must address directly the needs of students from poor families and they must begin well before students are in secondary school.

## Notes

1. Excluded from this list are Al-Azhar University, which falls under a different legal and administrative structure, and the small, private American University in Cairo.

2. In the following discussion, we will refer to all technical higher education as “upper-intermediate.” In 2006/2007, the two-year technical institutes accounted for more than 85% of all technical higher education students (Hozayin 2007).

3. In recent years, upper-intermediate education has fallen into disfavor. The share of students enrolled in upper-intermediate institutes in the overall proportion of higher education students has been declining. Though this pattern is expected to reverse slightly in the coming fifteen years, universities will continue to dominate higher education in the country (Helal 2007).

4. This figure includes not just government general and technical students, but also those in private secondary school and those in the Al-Azhar educational system. The Al-Azhar schools – primary through university – have an administrative structure that is separate from the public schools overseen by the Ministry of Education. Al-Azhar schools provide an education to that of the general / academic schools of the Ministry of Education, but with a curriculum that has a somewhat more religious orientation.

5. At the end of the third year of technical school, if students obtain high grades (70–75%) they are allowed entry into the second year of some institutes and some specified university faculties such as commerce. With the more prestigious faculties—such as

engineering, which is particularly appropriate for industrial school students, students are required to sit for another examination based on additional and advanced curricula and study.

6. Tracking to technical education with the goal of reducing demand for university education has been noted in other countries as well (see Shavit and Blossfeld 1993).

7. The ever enrollment rate is defined as whether or not a child has ever gone to school. When a child begins school, that child is said to have “ever-enrolled.”

8. General secondary comprises three years and culminates in national competitive exams (*thanaweya amma*); based on the scores from these exams students are ranked and accepted to universities and faculties. The examinations and the build-up to them have been a subject of concern for families and students alike. It is also a popular subject in the media and the question of how to simplify *thanaweya amma* procedures is always a top priority for education ministers following cabinet reshuffles. In the last few years, the tension has been so heightened that a few students committed suicide for failing to obtain the scores they had aspired to for entry in the university.

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