

Basic Education and Capability Development in Turkey

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Updated: Monday, August 04, 2008

Forthcoming in, Arnd-Michael Nohl, Arzu Akkoyunlu-Wigley and Simon Wigley (eds.)
Education in Turkey (Munster/New York: Waxmann) Arzu Akkoyunlu-Wigley

1. INTRODUCTION

The value of education is commonly measured in terms of its ability to improve economic growth or the earnings of individuals. According to that approach, education enables society or individuals to accumulate a stock of human capital, which can then be used to generate macro or micro level income growth.¹ In this chapter our aim is to examine education in Turkey based on the human capabilities approach developed by Amartya Sen and, more recently, by Martha Nussbaum (Sen, 1999; Nussbaum, 2000). The capabilities approach rejects a development strategy based on human capital, firstly, because it does not require that all individuals receive a sufficient education and, secondly, because it is based on an impoverished metric of human well-being.

In the first place, an approach to development that is based on human capital may postpone extending a basic education to some children if that is the optimal strategy for expanding economic growth or combating income poverty. It may be argued, for example, that the social conditioning of gender roles means it is more costly to expand the educational attainment levels of female children. Thus, prioritizing investment in the length and quality of education available to male children may be seen as a more cost effective way of driving economic growth. The postponement strategy may be further defended on the grounds that income poverty can be best overcome by letting the fruits of growth trickle-down or be redistributed to the poor, rather than by directly improving the earnings potential of the poor. According to the capabilities approach each individual has a fundamental right to at least a basic education because without it they lack the necessary preconditions for doing things and achieving results that they have reason to value. In other words, society has a duty to ensure that each individual can acquire at least a sufficient education, irrespective of their relative ability to contribute towards income growth.

¹ For extended discussions of the human capital approach see OECD/UNESCO (2002, chap. 1) and Psacharopoulos and Patrinos (2004). See also the application of the human capital approach to the Turkish case by Michi and Michi in this volume (2008).

In the second place, the capabilities approach contends that education should not be evaluated solely in terms of its effect on the extent and distribution of resources. By way of illustration consider a country where those individuals who do not complete a basic education are not deprived in terms of their real income or commodity holdings. That is to say, they are not resource deprived even though they are deficient in the basic abilities fostered by educational participation (e.g. problem-solving, reading, writing, communicating etc). According to the advocates of the capabilities approach those individuals still lack the basic capability to do and be what they have reason to value. They are less able, for example, to protect their legal rights, use health care services, take part in public deliberation, escape a domineering household relationship, avoid belittling working conditions, and so forth. The human capital approach, therefore, may lead to policies that fail to take adequate account of each individual's life quality.

In the following section we endeavor to further clarify the distinction between human capabilities and the narrower notion of human capital. Taking that distinction seriously we then, in section three, employ two indicators - literacy and educational attainment - in order to estimate the level of human capability development in Turkey relative to other countries with similar or lower levels of income per capita. Section four examines the distribution of educational attainment within Turkey and the effect of the extension of compulsory education from five to eight years in 1997. We ask whether that policy shift has improved the attainment levels of poorer children, and especially poorer female children. Section five assesses the extent to which the expansion of basic education has actually improved the learning outcomes of those students who successfully graduate. In section six we argue that recent educational policy in Turkey has overemphasized the expansion of educational participation and neglected the quality and targeting of educational resources. As a result a significant proportion of students from less advantaged backgrounds, especially female students, are either not completing the basic education cycle or are graduating with at best the absolute minimum level of proficiency in reading, mathematics, science, and problem-solving. Enrolment figures, therefore, significantly overestimate the level of capability development brought about by the extension of compulsory education in 1997.

2. THE CAPABILITIES APPROACH

The capabilities approach contends that the correct metric of human well-being and, therefore, the value of education, is the capability to achieve valuable functionings.² Perhaps the best way to understand what is meant by functionings is to contrast it with two alternative ways of evaluating life quality, namely welfarism and resourcism. According to welfarism we should gauge an individual's life quality based on her level of mental satisfaction (i.e. welfare or utility). According to resourcism, the metric that informs the human capital approach, we should evaluate an individual's life quality based on the real income or commodity holdings at her disposal. Advocates of the capabilities approach wish to depart from both those standard ways of understanding human well-being.

The problem with welfarism is that individuals will tend to adapt their subjective assessment of a particular state of affairs according to their chances of achieving it. Thus, those from more disadvantaged backgrounds will tend to downplay the mental satisfaction to be gained from what they cannot achieve and exaggerate the mental satisfaction to be gained from what they can achieve. As a result public policy based on welfarism may end up devoting insufficient attention to expanding the opportunities of those who, through sheer bad luck, are born into deprived circumstances (Sen, 1985a, pp. 191, 196-197; 1985b, pp. 21-2, 29; 1987, pp. 11-2). Equally, it may end up depriving female children of educational resources in those societies where their expectations have been shaped by traditional gender roles (Nussbaum, 2000, pp. 135-

² We elaborate upon some of the points discussed in this section in Wigley and Akkoyunlu-Wigley (2006).

148; 2003, p. 342-343). The problem with resourcism is that it fails to take account of the fact that individuals possess different abilities to convert resources into well-being. A person, for example, with a higher metabolic rate will require more food in order to be adequately nourished (Nussbaum, 2000, pp. 68-69; Sen, 1987, pp. 15-6; 1992, pp. 27, 33).³

Thus, the capabilities approach contends that we require a measure of well-being that is midway between the possession of resources and the mental satisfaction to be derived from those resources. As Sen puts it in the case of nourishment, “We must look, for example, at her nutritional level, and not just, as ... [resourcists] ... do, at the supply, or as the welfarists do, at the utility she gets out of eating food” (Sen, 1993, p.43). Valued functionings, therefore, are ‘doings’ and ‘beings’ such as being adequately nourished, being able to avoid preventable morbidity and premature mortality, being literate and numerate, being able to appear in public without shame and so on. A person’s life quality is defined by alternative combinations of functionings that she is capable, if she so chooses, of achieving. Thus, capabilities are best understood as options to achieve valuable functionings (Sen, 1992, pp. 40, 50).

The significance of education is that it enables the acquisition of a basic set of cognitive functionings – reading, writing, calculating, practically reasoning, and so on – that are the necessary, but not sufficient, preconditions for achieving other important functionings. In other words, they enable the capability to function in various other ways. Take, for example, the functioning of being able to effectively participate in the process of public decision-making. The achievement of the basic set of cognitive functionings will bolster the ability of individuals to engage in public debate and reach an informed judgment about public policy and the performance of elected representatives. One consequence of this is that it is more likely that government policy will be aimed at ensuring that all have access to education and health care services of sufficient quality. Now consider the functioning of being able to avoid preventable ill-health and premature death. Empirical evidence suggests that educational attainment, especially of females, is an important determinant of infant, child and maternal mortality rates. One explanation for this is that those who acquire the basic set of cognitive functionings are better equipped to understand their own health and nutrition requirements and to more effectively utilize health care services. A further explanation is that the basic cognitive functionings can improve health because they enable the individual to acquire the commodities necessary to be adequately nourished, clothed, sheltered, and so on. Notice, however, that even when we acknowledge that the pro-health effect of education can work through resources the focus of attention is on the individual’s ability to convert those resources into valued functionings, not the resources themselves.

In addition, education may be seen as a way of fostering intellectual functionings that are of intrinsic value. Martha Nussbaum, for example, argues that a child who does not participate in an adequate education is denied the chance to cultivate the human powers of imagination and inquiry (2003, pp. 335-337, 352). Equally, a person may value knowing something for its own sake (e.g. geometry, history), rather than because of what it enables them to do (Brighouse, 2006, pp. 53-54). That suggests that an adequate education can enable more than the acquisition of a set of productive skills and more than the capability to function in other important ways.

From this we can see that the problem with the human capital approach is that it measures the value of education in terms of the resources that are expected to be accrued by the individual. As a result it neglects to take account of variations in conversion ability and the non-resourcist role of education. In the first place, it fails to take sufficient account of inequalities in the ability to convert earnings potential into actual earnings (e.g. discrimination in the labor market) and earnings into valued functionings (e.g. higher metabolism). In the second place, it fails to factor in the ability of education to enable valued functionings

³ For further elaboration of the debate between resourcism and the capabilities approach see Berges (2007).

independently of its ability to do so by way of resource accumulation (e.g. being adequately nourished requires both food and an understanding of one's nutritional requirements).⁴ Because it ignores the non-resourcist role of education, the human capital approach may not ensure that an individual can complete at least a basic education if there are deemed to be other more effective ways of elevating his or her resource holdings above some threshold level (e.g. welfare transfers, income of the family breadwinner, etc). Investing in the education of female children, for example, may be seen as of little value if the presence of entrenched gender roles means that women are less likely to be employed than men with the same level of education or, if they are employed, to earn less than men with the same level of education (Robyens, 2006, pp. 73-74). As result the individual will be denied the capability to achieve other essential functionings (e.g. escape an abusive relationship, effective political participation etc). For that reason the capabilities approach insists that the government and parents have a moral duty to ensure that each and every child can achieve at least the basic set of cognitive functionings. Finally note that, because of inequalities in the ability to convert educational resources into learning outcomes (e.g. disabilities, social conditioning, language spoken at home is different from the language of instruction etc), fulfilling that duty will require the unequal distribution of the extent and quality of those resources.

We have argued that in terms of the value of education the appropriate metric is valuable functionings and that in terms of the distribution of education, thus measured, the appropriate demand is that each individual be provided with the means to achieve at least those cognitive functionings that are essential for achieving other functionings. The latter distributive principle indicates that priority must be given to leveling all children up to at least an adequate level of educational achievement. What that threshold level is, and therefore the length and quality of education that is required, is matter of controversy. In this chapter we will mainly be focusing on primary education in Turkey, but it may very well be the case that completion of secondary education of sufficient quality is required in order to achieve the basic cognitive functionings.⁵

Note, however, that advocates of the capabilities approach also have reason to be concerned about disparities in educational achievement irrespective of whether the threshold condition has been fulfilled. To see this notice that education is a positional good in virtue of the fact that the absolute value of an individual's educational qualification depends on where they end up being placed in terms of the distribution of qualifications (Brighouse and Swift, 2006; Unterhalter and Brighouse, 2007, pp. 77-79). Take, for example, the relationship between qualifications and career opportunities. Those individuals with a secondary school education will typically be ranked higher by employers than those individuals with only a primary school education. Thus, the absolute value of their qualification is greater because of their relative positioning and not simple because of the extent of their educational achievement. Everything else being equal, the absolute value accrued by them will diminish as more and more individuals go on to complete a secondary education. Equally, the absolute value accrued by those left with only a primary school education will diminish as more individuals go on to the secondary school level. Increases in educational disparities, therefore, push down the value that education has for those with a lower level of educational achievement. Note also that those disparities in educational achievement will tend to reflect and reinforce background socioeconomic and gender disparities.⁶ The positional aspect of educational achievement can have an impact

⁴ Elsewhere we have statistically examined the link between education and health functionings in developing countries. There we found that educational attainment has a significant income-independent effect on life expectancy (Wigley and Akkoyunlu-Wigley, 2006). That further reinforces the claim that resources represent an overly narrow metric of the value of education.

⁵ On primary education in Turkey see Gümüŝ's contribution to this volume. On secondary education see the chapter by Okçabol.

⁶ In Turkey, for example, parents invest heavily in private exam preparation classes (*Dershane*) so as to improve the performance of their offspring in the secondary school and university entrance exams (World Bank, 2005a, pp. 32, 34-35); Tansel and Bircan, 2006). As a result, success in those exams and, thereby, placement in a higher ranked secondary school or university tends to

on people's capability to function in at least three ways. Firstly, it can affect the earnings that the individual has available for realizing valuable functionings. Secondly, it will determine the extent of influence that each individual has in the family, workplace and political domain and, therefore, their ability to influence decision-making that has an impact on their capability to achieve valued functionings. Thirdly, there is a growing body of evidence in support of the claim that the extent to which individual's are subject to the discretion of another is a significant determinant of health. Lack of control over one's circumstances elevates stress levels and, thereby, has a negative impact on mental and physical health (Marmot, 2006, pp. 52-54). Thus, the capabilities approach has reason to focus on both the threshold level of educational achievement and disparities in educational achievement.

3. A CROSS-COUNTRY ASSESSMENT OF CAPABILITY DEVELOPMENT IN TURKEY

We now turn to consider how well Turkey compares with other countries in terms of the capability for functioning in certain basic ways. We find that Turkey represents a paradigm example of a country with comparatively low levels of income deprivation, and yet comparatively high rates of mortality and illiteracy. That is consistent with an approach to development that focuses on resource expansion rather than ensuring that all can acquire the capability for functioning in certain essential ways.

Our analysis is based on a comparison between countries that are characterized by similar levels of income per capita (the columns in Tables I and II are ranked accordingly) and a similar proportion of the population below 14 years of age. To the extent that the availability of data permits we have attempted to ensure that the set of countries we compare are sufficiently representative of differing regions. We begin by considering more direct indicators of the capability for functioning (longevity, mortality and literacy) in relation to income poverty and income distribution. We then move on to compare the level of educational attainment that has been achieved in each country.

3.1 Income and functionings

What we can observe from Table I is that Turkey performs comparatively well in terms of income poverty and income distribution. The problem with gauging inequality and deprivation in terms of income should now be clear. Because of differences in the ability to convert resources into functionings, income represents an inadequate measure of disparities in, and the deprivation of, the real opportunity to 'do and be'. For that reason it is important that we evaluate the development record of each country based on basic functionings achieved (or at least indicators of, e.g. literacy, life expectancy, mortality).

reflect each student's socioeconomic background. In addition, tradition bound parents are more likely to use what resources they do have on the private tutoring of their male offspring.

TABLE I
Income Distribution, Longevity, Mortality and Literacy

	Indonesia	Jamaica	Philippines	Paraguay	China	Peru	Turkey	Thailand	Brazil	Mexico	Malaysia	Chile	Country mean
Income and Distribution													
GDP per capita, PPP (current international \$), 2002	3138.20	3773.98	4021.49	4419.29	4474.72	4923.74	6175.52	6787.90	7516.40	8706.85	8921.60	9560.72	6035.04
Population living below \$2 a day (%), 1990-2001*	55.40	13.30	46.40	49.30	47.30	41.40	10.30	32.50	23.70	24.30	9.30	8.70	30.16
Income share held by highest 20%, 2000	43.29	46.01	52.28	60.66 ³	46.64 ³	51.20 ¹	46.72	50.00	64.06 ³	57.60 ³	54.30 ²	61.29 ³	...
Income share held by lowest 20%, 2000	8.41	6.67	5.38	1.91 ³	5.86 ³	4.40 ¹	6.06	6.06	2.16 ³	3.38 ³	4.40 ²	3.16 ³	...
Population ages 0-14 (% of total), 2002	29.83	30.25	36.31	40.63	24.22	32.40	27.06	23.20	27.89	33.04	33.16	27.23	30.44
Longevity and Mortality													
Life expectancy at birth, total (years), 2002	66.65	75.70	69.75	70.66	70.80	69.83	69.94	69.20	68.55	73.63	72.79	75.93	71.12
Mortality rate, infant (per 1,000 live births) (2001)	35.00	17.00	29.00	31.00	26.00	30.00	36.00	24.00	31.00	24.00	8.00	10.00	25.08
Mortality rate, under-5 (per 1,000 live births) (2001)	48.00	20.00	38.00	39.00	30.00	39.00	43.00	28.00	36.00	29.00	8.00	12.00	30.83
Death rate, crude (per 1,000 people) (2002)	7.30	5.70	5.60	7.50	4.90	6.20	6.60	7.80	7.10	5.10	4.40	5.70	6.16
Illiteracy Rates, 2000													
Illiteracy rate, adult total (% of people ages 15 and above)	13.19	13.08	7.40	6.73	9.08	10.15	13.50	7.35	13.63	9.46	11.30	4.24	9.93
Illiteracy rate, adult female (% of females ages 15 and above)	18.06	9.28	7.35	7.83	13.47	14.76	21.50	9.48	13.50	11.32	14.60	4.42	12.13
Illiteracy rate, adult male (% of males ages 15 and above)	8.22	17.05	7.46	5.62	4.86	5.35	5.60	5.10	13.77	7.44	8.00	4.05	7.71
Illiteracy rate, youth total (% of people ages 15-24)	2.28	5.95	4.91	2.93	1.14	3.27	4.46	2.02	5.82	3.39	2.80	1.14	3.34
Illiteracy rate, youth female (% of females ages 15-24)	2.86	2.54	4.28	2.96	1.50	4.77	6.85	2.15	4.28	3.52	2.70	0.98	3.28
Illiteracy rate, youth male (% of males ages 15-24)	1.70	9.27	5.54	2.90	0.80	1.78	2.18	1.90	7.35	3.25	2.80	1.30	3.40

Sources: UNDP, Human Development Report, 2003; World Bank, World Development Indicators (WDI), 2004.

Notes:

* The percentage of the population living below \$2 a day - at 1985 international prices (equivalent to \$2.15 at 1993 international prices), adjusted for purchasing power parity.

¹ 1996

² 1997

³ 1998

The inadequacy of gauging development in terms of income and its distribution is revealed by Turkey's performance with regard to longevity, mortality, and especially literacy. Countries with lower income per capita figures and with a greater proportion of the population below two dollars a day perform at least as well as Turkey in terms of life expectancy and better or similar in terms of mortality and death rates. In terms of the functioning of being literate Turkey's adult population is out-performed by all the countries with a lower GDP per capita and, with the exception of Brazil, by those countries with a similar or higher level of per capita income. In terms of youth illiteracy only Jamaica, the Philippines and Brazil perform worse than Turkey. Perhaps most disturbingly the adult and youth illiteracy rate for females is markedly higher in Turkey than the other countries in the sample. Indeed, with the exception of its male population, illiteracy rates in Turkey are significantly higher than the averages for both lower middle-income and upper income-countries (World Bank, WDI, 2004).

It should be acknowledged that, once we take account of per capita income, the capability record of Brazil is at least as bad as that of Turkey. However, Brazil is hardly a country that Turkey would wish to emulate. For as Jean Drèze and Amartya Sen note Brazil is the exemplar of a country that has failed to support capability development either prior to economic growth or through economic growth (Drèze and Sen, 1989, pp. 188-9; Drèze and Sen, 2002, pp. 72, 309-10). The conclusion we reach, therefore, that it is only in terms of income deprivation and income distribution that Turkey can take heart. But where it really matters, namely the capability to function in life, Turkey's record is worrying. Hence, Turkey represents a paradigm example of the discrepancy between human and economic development. Not surprisingly, therefore, Turkey ranks ninety-sixth out of 173 countries in terms of Human Development Indicators in 2003 (UNDP, 2003), even though it qualifies as the seventeenth most industrialized country in the world.

3.2 Educational attainment

The upshot of the analysis in the previous section is that Turkey has neglected to complement its market-orientated policies by providing for health care and education. Turning our attention solely to education we now consider whether completion and enrolment levels support that provisional conclusion. Compared with literacy, attainment provides an indirect indicator of the achievement of cognitive functionings. Nevertheless, it does allow us to observe the potential for functioning beyond the domain and minimum measured by literacy figures.

In terms of average number of years of schooling (Table II) Turkey falls more than one year short of the sample average - only Brazil, and Indonesia perform worse than Turkey - and one year short of the average for lower middle-income and upper middle-income countries (World Bank, EdStats, 2002). Moreover, aside from China, the completion gap between women and men is markedly higher in Turkey than the other countries in the sample. According to OECD estimates, in 2001 only 30 per cent of 25-35 year-olds in Turkey had completed at least a secondary education. This compares with an OECD average of 74 per cent and an average of 41 per cent amongst those 12 countries participating in the OECD/UNESCO World Education Indicators Program (OECD, 2003, EAG, table A1.2).

TABLE II
Completion and Enrolment

	Indonesia	Jamaica	Philippines	Paraguay	China	Peru	Turkey	Thailand	Brazil	Mexico	Malaysia	Chile	Country mean
Average years of schooling of adults, 2000*													
Total	4.99	5.26	8.21	6.18	6.36	7.58	5.29	6.50	4.88	7.23	6.80	7.55	6.40
Male	5.52	4.89	8.24	6.28	7.57	8.05	6.21	7.03	5.37	7.59	7.40	7.58	6.81
Female	4.47	5.63	8.21	6.09	5.08	7.12	4.33	5.98	4.41	6.88	6.20	7.52	5.99
Gender gap	1.05	-0.74	0.03	0.19	2.49	0.93	1.88	1.05	0.96	0.71	1.20	0.06	0.81
Net enrolment ratio, primary education, %, 2001**	92.14	95.19	92.98	91.50	92.76 ¹	99.94 ¹	87.94	86.31	96.53	99.40 ¹	95.17	88.83 ¹	93.22
Net Enrolment Rates by Age, 15-18 year olds, 2001***													
% 15 year olds in secondary education	54.48	81.90	68.56	55.15	...	74.42	44.33	74.06	77.22	53.13	72.73	87.54	67.59
% 16 year olds in secondary education	44.35	63.92	60.11	52.57	...	62.49	40.93	64.68	74.66	44.70	78.42	84.55	61.04
% 17 year olds in secondary education	47.39	31.70	27.77	45.84	...	39.38	21.20	53.24	66.61	33.26	13.41	78.46	41.66
% 18 year olds in secondary education	27.96	7.56	17.40	33.71	...	21.54	6.26	35.72	57.44	16.30	13.41	58.24	26.87

Sources: OECD, EAG, 2003, table C1.3, World Bank, EdStats, 2002 and World Bank, WDI, 2004.

Notes:

*Years of formal schooling received, on average, by adults over age 15.

**The ratio of the number of children of official school age (as defined by the national education system) who are enrolled in school to the population of the corresponding official school age.

***Net enrolment rates by level of education in public and private institutions (based on head counts)

¹ 2000

In terms of net enrolment at the primary level (Table II) Turkey is below the sample average, although as we shall see in the following section there has recently been a marked improvement in this area. Note, however, that completion rates are a more reliable indicator of attainment because school administrators may inflate the number of enrolments in order to obtain more funding from the government and students who enroll at the start of the academic year may not actually go on to attend school throughout that year (Barro and Lee, 1993, pp. 5-6). In addition, students may be enrolling for most of the primary education cycle, but then dropping out before graduating. Thus, a comparatively high primary enrolment ratio is compatible with a significant proportion of students not completing primary education. We argue in the following sections that there is good reason to believe that the extent of completion is significantly lower in Turkey than primary net enrolment ratios suggest. As we can see from the net enrolment by age figures for 2001 (Table II) enrolment at the secondary level is particularly low. Note that there is a sharp drop off rate in the transition between age 17 and 18 in Turkey because the majority of secondary schools are only three-year programs. Hence, not only is the level of enrolment comparatively poor, the duration of secondary education is comparatively less than the other countries. What this indicates is that the level of attainment at the secondary school level is remarkably low.

It is not really possible to interpret educational attainment as anything more than a rough indicator of the achievement of cognitive functionings. For the extent to which each person can achieve those functionings hinges on the pedagogical quality of the curriculum, teachers, and instructional materials that they are presented with whilst they are at school. Having said that, educational attainment (and especially completion rates) will at least in part reflect schooling quality because the latter is an important determinant of whether parents are willing to keep their children in school. We turn to examine educational quality in Section 5 below.

4. THE DISTRIBUTION OF EDUCATIONAL ATTAINMENT IN TURKEY

In the 1997-1998 school year compulsory education was extended from Grade 5 to Grade 8 in Turkey. Five year primary schooling was combined with three year lower secondary schooling to create an eight-year basic education cycle. In this section we will argue that the extension of compulsory education to eight years has not sufficiently improved the educational attainment levels of the poorest and female segments of the population. We proceed based on the not unreasonable assumption that a shortfall in attainment (e.g. non-completion of basic education) entails a shortfall in educational achievement (e.g. non-achievement of the basic cognitive functionings). Nevertheless, the quality of the education that is being provided is also a key determinant of educational achievement. Indeed, as we shall see in the following section, a high proportion of students that have completed the basic education cycle have achieved only the absolute minimum level of proficiency in mathematics, reading, problem-solving and science.

4.1 Educational attainment before 1997

Prior to 1997 the attainment shortfall was particularly acute in the transition from primary school level to the lower secondary school level at the age ten (i.e. the shift from Grade 5 to 6). According to the 1998 Demographic and Health Survey, 92 per cent of 15-19 year-olds had completed up to Grade 5, while only 56 percent had completed Grade 6 (and only 40 percent went on to complete Grade 9, the first year of upper secondary school)(Filmer, 2008).⁷ What is more, the dropout rate amongst the poorest was markedly higher than it was amongst the richest. In 1998 only 39 per cent of the poorest 40 per cent of 15-19 year-olds had completed Grade 6 as compared with 80 per cent of the richest 20 per cent (26 per cent of the poorest completed Grade 9 as compared with 63 per cent of the richest) (Filmer, 2008). Similarly, the drop out rate at

⁷ For an explanation and cross-country analysis of this data see Pritchett and Filmer (1999).

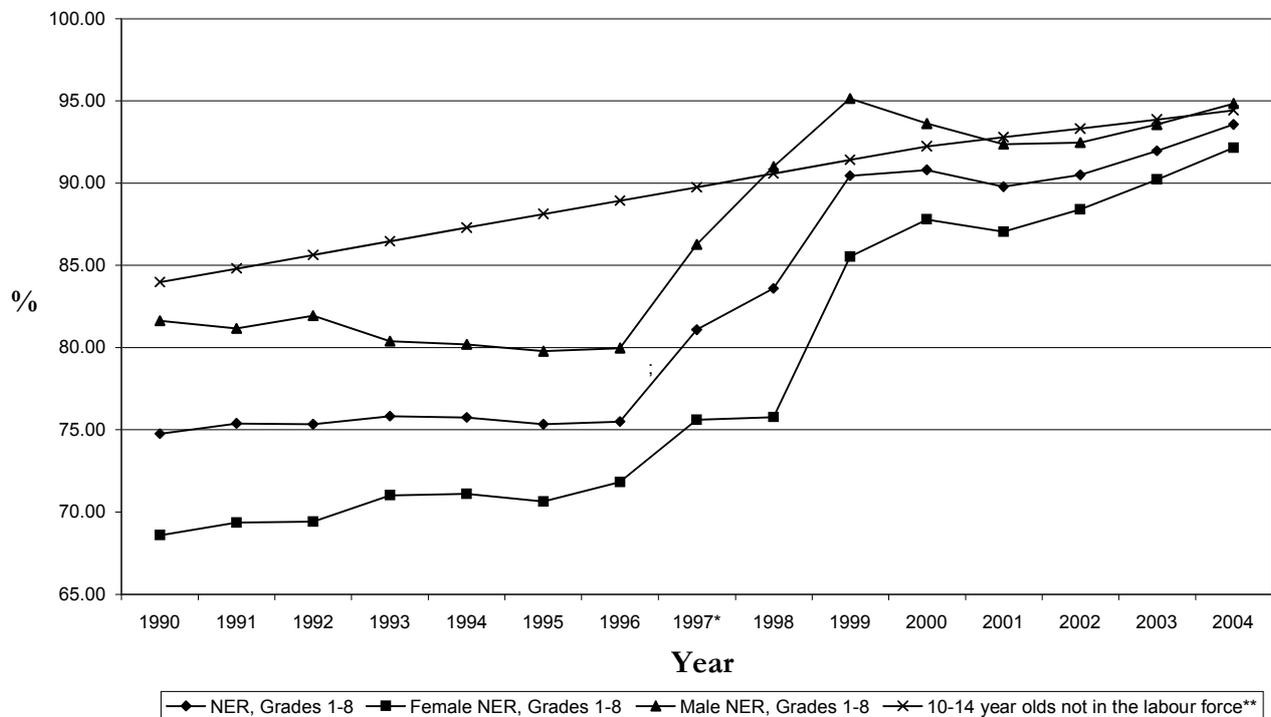
Grade 6 amongst females was significantly higher than their male counterparts.⁸ Only 49 per cent of female 15-19 year olds went on to complete Grade 6 (a 50 per cent decrease from Grade 5) as compared with 66 percent of male 15-19 year olds (a 30 per cent decrease from Grade 5). What this suggests is that by as late as 1997 capability development in Turkey was being severely hampered by the fact that a large proportion of the poorer and female segments of the population were not progressing beyond Grade 5. We now turn to discuss whether the extension of compulsory education in 1997 has a significant impact on attainment levels.

4.2 Educational attainment after 1997

Between 1991 and 1996 the net enrolment rate for Grades 1 to 8 was not improving. However, after compulsory education was increased from five years to eight years in 1997 the net enrolment ratio for those grades increased markedly from 76 percent in 1996 to 94 per cent in 2004 (Figure 1).

FIGURE 1

Basic Education Net Enrolment Ratios (Grades 1-8) and Child Labor Force Participation Rates, 1990-2004



Sources: SPO/UN, 2005 and World Bank, WDI, 2004

Notes:

*Extension of compulsory education from five to eight years.

**Share of the 10-14 age group not active in the labor force. Labor force comprises all people who meet the International Labor Organization's definition of the economically active population.

Although, six per cent of primary school age children (ages 6 to 14) remained unenrolled in 2004, there can be little doubt that the extension of compulsory education to Grade 8 has had a significant effect on overall enrolment and on the enrolment gap between boys and girls (Figure 1). It has also had a significant knock-on effect on enrolment in secondary education (Table III).

⁸ This serves to reinforce the conclusions reached by Aytac and Rankin's (2004) analysis of the 1988 Turkish Family Structure Survey and Aysit Tansel's (2002) analysis of the 1994 Household Survey.

TABLE III

Secondary Education Net Enrolment Ratios

Net enrolment rates by age*	2001	2005
% 15 year olds in secondary education	44.33	59.00
% 16 year olds in secondary education	40.93	55.00
% 17 year olds in secondary education	21.00	28.00
% 18 year olds in secondary education	6.26	16.00

Source: OECD, EAG, 2003, Table C1.3; OECD, EAG, 2007, Table C2.3

Notes: * Net enrolment rates by level of education in public and private institutions (based on head counts)

However, as we shall see in the remainder of this section, it is by no means clear that the extension of mandatory education has had a significant affect on the actual attainment levels of poorer, and especially poorer female, children. Completion (section 4.2.1), regional and gender (section 4.2.2) as well as child labor (section 4.2.3) figures suggest that the basic education program has largely passed those children by.

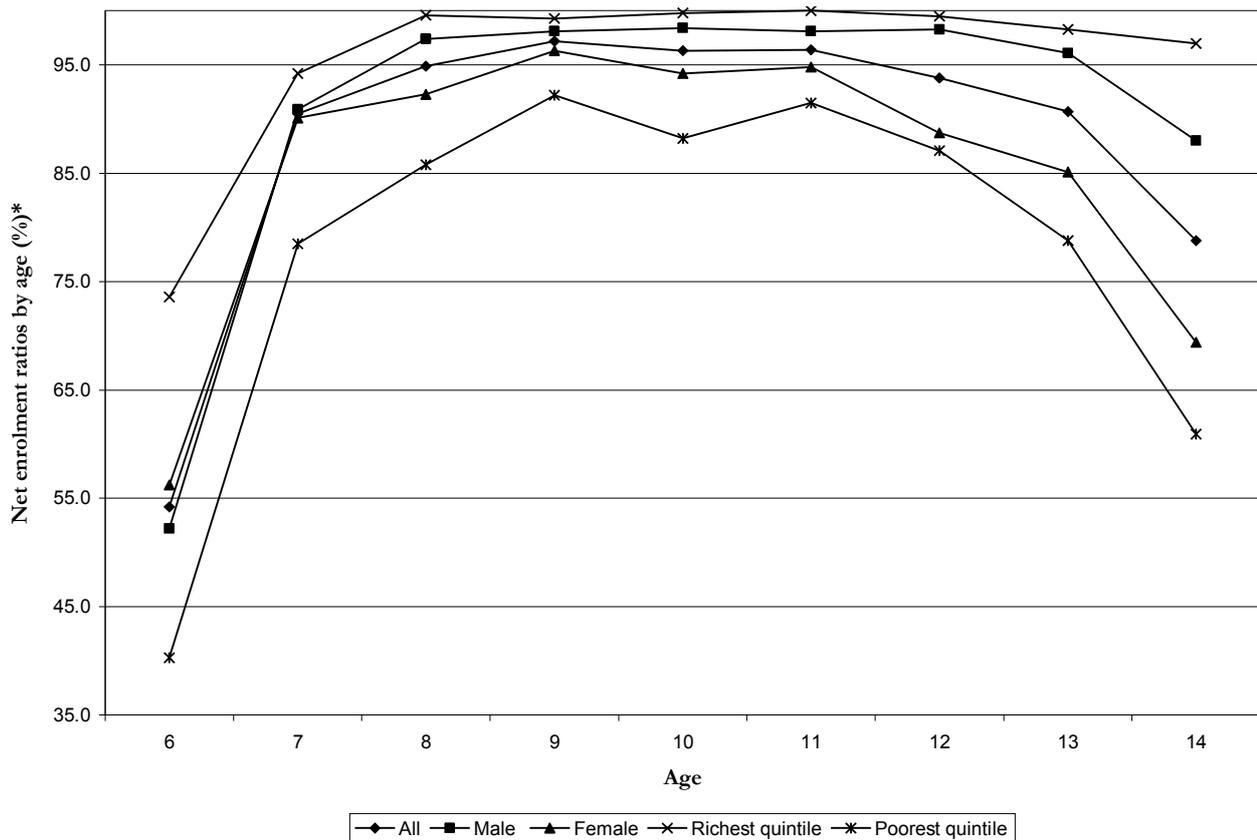
4.2.1 *Disparities in completion*

As we have already noted (section 3.2), the problem with enrolment figures is that they may overstate the actual level of educational participation. Thus, with the extension of compulsory education students may be enrolling in order to meet the legal requirement, but not actually attending. In addition, the overall enrolment ratio for all those of primary school age does not provide a sufficiently accurate picture of completion rates. Some children may be enrolling for most of the primary school cycle and then dropping out in the final few years of that cycle. Indeed a recent interview-based study of 122 low-income households concludes that the incidence of non-attendance amongst the poorest is significant (Ayata and Ayata, 2003, pp. 121-4, 137). The authors of that study contend that the extension of compulsory education from five to eight years meant that poorer children are even more prone to drop out or irregularly attend because their families will now tend to have more children of school age at one time, and therefore more direct costs and more lost labor earnings. Moreover, tradition-bound parents may be averse to allowing their daughters to attend the later primary school grades as they approach puberty, preferring instead to use them for work at home or to arrange an early marriage.

That conclusion is supported by the results of the Demographic and Health Survey carried out in 2003, six years after the extension of compulsory education (Hacettepe University, 2004, TDHS-2003; Filmer, 2008). What that survey shows is that between the ages of 11 and 13 (the ages included by the extension of compulsory education) enrolment rates by age decreased markedly, especially amongst females and those from poorer backgrounds (Figure 2).

FIGURE 2

Primary Education Net Enrolment Ratios by Age, 2003



Source: Filmer, 2008

Notes: *Percentage of children for each age who are enrolled in primary education.

Between the ages of 11 and 13 the female NER decreased by 10 per cent, while the male NER only decreased by 2 per cent. Similarly, the NER of the poorest decreased by 13 percent, while the NER of the richest only decreased by 2 per cent. That suggests that a high proportion of female and poorer students are not in fact completing eight years of compulsory education. The gender gap in terms of completion is also significantly greater than the gender gap in terms of the overall net primary enrolment ratio might suggest (Figure 1).

4.2.2 The persistence of regional and gender disparities

In addition the 2003 Demographic and Health Survey shows that there remain significant disparities in enrolment between the poorest and richest regions in Turkey (Table IV). Six years after the extension of compulsory primary education the net enrolment ratio in the more deprived eastern Anatolian regions remained markedly lower than that in the more prosperous western regions. In addition, far fewer students from those poorer regions are progressing to the (non-compulsory) secondary school level.

TABLE IV
Regional and Gender Disparities

	South East Anatolia	Central East Anatolia	North East Anatolia	West Anatolia	Marmara West	Istanbul	Turkey
GDP per capita (PPP, \$US), 2001	3389	3059	2626	6608	6855	8752	6132
Primary NER* (%) (Grades 1-8), 2003							
Male	85.4	81.6	88.1	91.2	94.7	94.6	90.6
Female	70.9	73.3	78.9	91.2	91.7	92.3	87.0
Total	78.5	77.6	83.6	91.2	93.1	93.4	88.8
Gender gap	14.5	8.3	9.2	0.0	3.0	2.3	3.6
Secondary NER* (%) (Grades 9+), 2003							
Male	32.8	35.6	49.5	70.5	60.9	58.6	53.0
Female	19.5	23.0	32.4	69.8	60.5	57.4	46.9
Total	26.1	29.3	41.1	70.1	60.7	58.1	50.0
Gender gap	13.3	12.6	17.1	0.7	0.4	1.2	6.1

Sources: State Institute of Statistics (SIS); Hacettepe University, 2004 (TDHS-2003)

Notes:

* Percentage of children of school age that are enrolled in primary education or secondary education.

The table also indicates a significant discrepancy between male and female enrolment (at both the primary and secondary levels) within each of the poorer regions, as well as between female enrolment in those regions and female enrolment in the western regions and the country as a whole.⁹

4.2.3 Child labor and educational attainment

We also note that the labor force participation rate of those children aged between ten and fourteen was hardly affected by the extension of compulsory education to that age group in 1997 (Figure 1). That is, the extension of compulsory education did not significantly improve on the rate at which the child labor participation rate was already decreasing prior to 1997. Note also that after 1997 the annual household labor force surveys will tend to underestimate the actual number of children who are economically active because respondents are aware that it is illegal both for their children to be working under the age of fifteen (although work that does not ill effect the health and education of children is permitted from age thirteen onwards) and not to attend school between Grade 1 and 8 (an anti-truancy fine was introduced with the inception of eight-year compulsory education). Despite this, by 2002 the child participation rate in the economy (6.67 per cent) remained significantly higher than the average for lower middle-income and especially upper middle-income countries (5.39 per cent and 1.94 per cent respectively) (World Bank, 2004, WDI). In Turkey the probability of child labor remains comparatively high in part because rural areas are still heavily reliant on agriculture and because of the prevalence of double-shift schooling in the cities (Hancioğlu et al, 2000, pp. 52-4).

What is more, it would seem that the reason for the sluggish decline in the child labor force participation rates was not due to children attending in order to comply with eight-year mandatory education and yet remaining economically active. For, according to the Child Labor Force surveys of 1994 and 1999 the proportion of six to fourteen year olds who were both attending school and economically active declined between those years (ILO/SIS, 2001, table 2). Nevertheless, the problem is not helped by the continued practice of double-shift schooling. Indeed, during the 2003-2004 school year the proportion of double shift primary schools actually increased from 22 per cent to 23.5 per cent (OECD, 2007a, p. 47). Even where children are attending and economically active or burdened by household chores the problem remains because

⁹ For further analysis of educational disparities between women and men in Turkey see the study by Otaran and colleagues (2003) as well as the chapter by Fevziye Sayılan in this volume.

their ability to educationally achieve suffers and the probability of dropping out increases (Bhalotra and Tzannatos, 2003, pp. 7-8; Allais & Hagemann, 2008, pp. 11-14). Child labor force participation rates, therefore, indicate that the extension of mandatory education has had little or no effect on the proportion of children who are economically active. Hence, it is more likely that the ongoing decline of the agricultural sector in Turkey almost entirely explains the gradual decrease in the proportion of children that are economically active. Indeed, the incidence of child labor in the agricultural sector decreased markedly during the 1990's, whilst it remained constant in the industrial, trade and service sectors (ILO/SIS, 1999, table 7).

5. THE DISTRIBUTION OF LEARNING OUTCOMES IN TURKEY

We have seen that while overall primary enrolment has improved significantly since 1997 it remains the case that a significant proportion of the poorest and especially poorest female sections of the school age population are not completing the basic education cycle. We now turn to consider the quality of education that students receive if they do complete the eight years of compulsory education. Clearly the cognitive functionings that can be achieved by each individual depends on much more than just attending school and having access to educational resources (textbooks, teachers, classrooms etc). In terms of formal schooling it also crucially depends on such factors as the overall pedagogical approach, the design of the curriculum and the training of teachers. With that in mind we now turn to examine the core cognitive functionings (e.g. the ability to problem solve, analyze, reason, communicate etc) that have been acquired by those students who have managed to complete the basic education cycle.

To evaluate learning outcomes in Turkey we refer to the Programme for International Student Assessment (PISA) studies of 15-year-olds enrolled in formal education in 2003 and 2006 (OECD, 2004a; OECD, 2007b). We use the PISA studies, firstly, because they provide the most recent international assessment of learning outcomes in Turkey and, secondly, because their emphasis on assessing what students can do with what they have learnt, rather than reproducing what they have learnt, is more in keeping with the capabilities approach. The PISA studies show that socioeconomic background has a significant impact on learning outcomes in Turkey. In 2003 Turkey recorded the highest variance amongst the 40 participating countries in terms of between school variance in mathematics proficiency. Moreover, most of that variation was explained by the socioeconomic profile of schools (OECD, 2004a, pp. 162, 187-190). Similar results were recorded for the curricula domain of science in 2006 (OECD, 2007b, pp.171, 187-189). In addition, a significant proportion of 15-year-olds in Turkey could not achieve more than the lowest proficiency level in the domains of problem solving, mathematics, science and reading (OECD, 2004b, table 2.1; OECD, 2007b, tables 2.1a, 6.1a, 6.2a). In the domain of science, for example, 47 per cent of 15 year olds in 2006 could not achieve above 1 on the 6 level proficiency scale. Moreover, 13 per cent could not even achieve level 1. According to the PISA criteria, students at level 1 "...have such a limited scientific knowledge that it can only be applied to a few, familiar situations" (OECD, 2007b, p. 43).

One significant drawback of the PISA assessments is that they are based on the performance of 15-year-olds that are enrolled in formal education. Thus, differential drop-out rates between countries may significantly affect the results. In the case of Turkey we have already seen that 40 per cent of 15-year-olds were not enrolled in secondary education in 2005 (Table III). Indeed Turkey has the lowest proportion of enrolled 15-year-olds amongst those countries that participated in PISA 2003 and PISA 2006 (OECD 2004a, table A10.1; OECD 2007b, table A3.1). Thus, it is very likely that the PISA assessments overstate the average proficiency scores of those students in Turkey who have completed primary education and understate the impact of socioeconomic status in Turkey (OECD, 2004a, p. 184; OECD, 2007b, p. 190). The effect of this bias is highlighted by a recent study that used PISA 2003 to examine the cause of gender gaps in learning

outcomes (Guiso et al, 2008). In order to control for the bias generated by differential drop-out rates the authors calculated the gender gap in mathematics based only on responses by students from more favorable socioeconomic backgrounds (where dropping out is less likely) (Guiso et al, 2008, supporting online material). They found that the average mathematics score in Turkey was 22.6 higher for males and that only 2 of the 40 participating countries had a wider gender gap. However, when the test results for those from the bottom half the socioeconomic scale are included the gender gap shrinks to 12 points and the number of countries with a wider gender gap increased to 28 (OECD, 2004a, Table 2.1c). The researchers then presented evidence in support of the claim that gender differences in mathematics test scores are due to social conditioning, rather than biological factors. They found that the influence of culture persists between countries with a similar or identical evolutionary history.¹⁰

What the evidence suggests, therefore, is that the expansion of basic education in Turkey has failed to sufficiently enhance the cognitive functionings of a large proportion of those students who successfully graduated from primary school. That shortfall is particularly apparent amongst female students and those students from less advantaged backgrounds. It would seem that government policy since 1997 has tended to prioritize the expansion of educational participation and neglected to make the necessary improvements to the quality of the education that is being provided.

The persistence of disparities in completion (at the primary and especially secondary school levels) and learning outcomes means that richer and male individuals will continue to have a monopoly over positions of responsibility and leadership in Turkish society (e.g. managers, policy makers, politicians etc) and unequal influence in the family and workplace. Thus, those shortcomings are both preventing many individuals from achieving even the basic cognitive functionings and prolonging the dominance of men and the elite in Turkish society. Those relational inequalities will, in turn, have a negative effect on functionings insofar as it diminishes the influence that individuals can have over household, managerial and political decision-making that impacts on their capability to function (e.g. public health care policies).

6. COMPULSION AND EDUCATIONAL CAPABILITIES

Given that no child chooses their parents, and therefore the way they are raised, we would agree that parents are duty-bound to ensure their children receive at least a basic education. However, it is also the case that no child chooses to be born into impoverishment, and so society is also duty-bound to compensate for that handicap such that school attendance is a viable option for the families involved. Demanding that children attend school is clearly an ineffectual strategy when their parents are unable to bear the direct and opportunity costs of school attendance. Moreover, the legal imposition of a parental duty to send their children to school without simultaneously providing them with the means to fulfill that duty is normatively unjustified. In effect what this means is that parents and society are jointly responsible for providing each child's capability set. Given the fact that the interests of the child are paramount, there is undoubtedly a parental duty to send one's offspring to school, but that should only be legally enforceable if and when society fulfils its reciprocal duty to provide enough schooling resources of sufficient quality.

Looking at this issue from the perspective of freedom, rather than from that of duties, we can say that where compulsory education is under-resourced poorer parents are denied freedom both when it is interpreted as opportunity (the actual ability to achieve what one values) and when it is interpreted as process (choosing for oneself and immunity from interference by others) (Sen, 2002a and 2002b). They neither have the capability to

¹⁰ By contrast they contend that females are inherently better in the curricula domain of reading (Guiso et al, 2008). When those from more disadvantaged backgrounds are excluded the average reading scores in Turkey were 25.1 higher for females and only 6 other participating countries had a narrower gender gap. With the inclusion of those students from the lower half of the socioeconomic scale we find that the gap is 33 and 19 other countries had a narrower gender gap (OECD, 2004a, table 6.3).

let their child achieve her basic cognitive functionings, nor the right to keep her out of school. Thus, by way of illustration, rich conservative parents who wish to withdraw their daughter from school prematurely are denied freedom according to the process aspect, while the freedom of poor religious parents are denied freedom according to both the opportunity and process aspects. The denial of the process aspect for parents may be justified on the grounds that it is the future capability set of the child that is the overriding concern; in other words, the future opportunity freedom of the child trumps the current process freedom of her parents.¹¹ But non-enrolment and non-attendance is inevitable when, due to the lack of public provisioning, poorer parents are left with no choice but to disregard the law. Moreover, as we shall now see, the adequate public provisioning of the opportunity aspect may render the denial of the process aspect unnecessary. In other words, there may be no need to legally enforce the parental duty.

In section 4 we observed that the prohibition of full-time labor below the age of fifteen and the extension of mandatory education in Turkey (coupled with an anti-truancy fine) has had little affect on the incidence of child labor and the attainment rates of poorer and especially poorer female children. In other words, merely restricting the process freedom of parents and employers has done little to help enable the opportunity freedom of those children. We would argue that this is largely due to the government's failure to provide the preconditions - in terms of school resources and educational quality - that would encourage more impoverished parents to invest in the capability set of their children and especially their daughters.

Indeed, it is not clear that there is a need to make attendance a legal requirement in the first place. Santosh Mehrotra notes there are a number of countries – for example Sri Lanka, the state of Kerala in India, Malaysia - who achieved high enrolment levels in primary education without making it legally mandatory (Mehrotra, 1998, p. 14). The key in those cases was providing good reason why parents should voluntarily enroll their children by ensuring the quality of the education (curriculum design, teacher training, improvement of instructional materials etc) and minimizing the direct cost born by the household (provision of textbooks, stationary, uniforms, free school meals, transportation, etc) (Boyden et al, 1998, pp. 246-283; Fallon and Tzannatos, 1998, pp. 10-11).¹²

In this chapter we have largely set aside the question of pedagogy. But clearly in order to successfully convert resources into the basic cognitive functionings much depends on the pedagogical approach that informs the design of the curriculum, teacher training and the content of instructional materials, and not just the quantity and distribution of educational resources. What is more, pedagogical quality is an important determinant of whether parents are willing to send their children to school in the first place. For many parents the reason for non-enrolment or non-attendance may be because they perceive that the education system does not contribute sufficiently to the capability set of their children, rather than simply because of the cost of schooling or their patriarchal outlook.¹³ The persistence of low attainment and child labor, therefore, may very well be a product of the poor quality of educational resources rather than just a shortfall in the extent of their provisioning.¹⁴ Indeed in the preceding section we found that a high proportion of young adults who successfully completed the eight year basic education cycle have only, at best, achieved the bare minimum level of proficiency in reading, science, mathematics and problem-solving.

¹¹ For a useful discussion of the issue of trusteeship over the future capability set of children see Saito (2003, pp. 25-28).

¹² The fact that this is largely a supply-side problem is revealed by a recent interview study of 122 low-income households. It concludes that most low-income parents actually value the education of their offspring highly but that the burden placed upon them by school costs and the loss of labor is significant (Ayata and Ayata, 2003, pp. 121-2).

¹³ It remains possible that in some areas child labor under the right conditions is more or just as capability-enhancing as completing another year of basic education. See World Bank (2000, p. 73).

¹⁴ The focus on quantity to the detriment of quality after the extension of compulsory education to eight years is now acknowledged by public policy-makers (Dulger, 2004, pp. 16, 19).

In a move that should go a long way towards rectifying attainment disparities the government has recently started to provide a Conditional Cash Transfer (CCT) to mothers of poor children, provided they enroll and regularly attend school (World Bank, 2005b, pp. 112-113). In a number of other countries the introduction of a CCT has proven to be a particularly effective means of increasing attendance of girls and school age children in general (Rawlings and Rubio, 2005; World Bank, 2005a, pp. 47-48). In Turkey the educational grant covers both opportunity costs (income forgone because the child is not working) and direct costs (school books, transport etc). The significant advantage of CCT programs is that they simultaneously provide a way of tackling poverty, child labor (in effect the child is 'earning an income' for the family by participating in school) and the inadequate educational participation of female and poor children. In addition, it relies on incentives rather than coercion to tackle the problem of non-attendance and child labor. That is to say, the process freedom of parents is not compromised in order to achieve the opportunity freedom of their offspring. Thus, the CCT would seem to be a particularly effective and normatively justifiable way of increasing the demand for education amongst the poor. It runs into trouble, however, if the welfare transfer is contingent on participating in an education system that fails to sufficiently improve the cognitive functionings of students. As we noted, a large proportion primary of school graduates, and in particular those from less advantaged families, are barely achieving the minimal level of proficiency. Thus, on the supply side there is an urgent need to increase the quality and extent of educational resources that are devoted to those primary schools that are characterized by a lower socioeconomic profile (which includes the very schools that recipients of the CCT are attending).¹⁵ In a first step towards improving the overall quality of supply the Ministry of National Education has recently begun to implement curricula reforms that are based on student-centered learning.¹⁶ However, much depends on the whether those changes can be successfully adopted by those schools that are composed of less advantaged students.

It might be argued, nevertheless, that there are reasons for the shortfall and disparities in attainment and learning outcomes in Turkey that go beyond the lack of educational resources of sufficient quality. Those reasons relate to the content of the schooling that is mandatory in Turkey. Since the inception of the Turkish republic in 1923 the Turkish establishment has attempted to foster a national identity that is both secular and culturally/linguistically Turkish.¹⁷ Thus, the content of the 1997 compulsory education legislation had the effect of preventing parents from enrolling their children in religious schools (*imam hatip*) between the ages of twelve and fourteen.¹⁸ As a result conservative parents may now be resistant to sending their sons and, in particular, daughters to school after Grade 5; especially when that would require boarding or bussing away from the family home.¹⁹ Secondly, the language of instruction is Turkish rather than the mother tongue of the household (e.g. the Kurdish dialectics of Zaza and Kirmançi).²⁰ Children who speak a different language at home may not

¹⁵ Indeed the recent World Bank Education Sector Study suggests that the incidence of CCT recipients should be used to identify those schools that require extra educational resources (World Bank, 2005a, pp. 69-71).

¹⁶ For an explanation and assessment of those policy changes see the recent OECD review (2007a, pp. 55-63). The review notes that the high number of lessons per week, the persistence of a didactic approach in the classroom and the top-down implementation of the reforms are undermining the new orientation towards active learning (pp.58, 63).

¹⁷ On education and identity formation during the republican period see the chapters by Sema Taşçı-Günlü and Birol Caymaz in this volume.

¹⁸ For further clarification of the affect of the 1997 changes on religious schooling see the chapter by Ramazan Günlü in this volume. For and analysis of the relationship between Islam and education in Turkey see the chapter by İsmail Güven.

¹⁹ Based on the 1988 Turkish Family Survey, for example, Aytaç and Rankin found that girls are 1.7 times less likely to complete Grade 8 if their father believes in the physical separation of the sexes and half as likely if he believes that wives are only good for housework (2004, pp. 278-9).

²⁰ In the 2001 Progress in International Reading Literacy Study (PIRLS) 13 per cent of grade 4 students reported that they sometimes or never use the language of the test (Turkish) at home. In the 1999 Trends in International Mathematics and Science Study (TIMSS) 8 per cent of grade 8 students reported that they sometimes or never use the language of the test at home (TIMSS/PIRLS, 2008). Most people in South East and East Turkey report that Turkish is not the language used at home (Sahin and Gülmez, 2000a, 104 and 2000b, pp. 223-24).

understand what the teacher is saying at the start of their formal education and so they are expected to learn the second language at the same time as learning other academic skills by way of that second language. This may have a deleterious affect on cognitive development and educational participation. International evidence suggests that where the language of instruction is the same as that spoken at home children more quickly learn (a) to read (b) to read in a second language, (c) other cognitive skills (e.g. numeracy, scientific literacy etc) and (d) subject-content material (Dutcher and Tucker, 1997). International evidence also indicates that the likelihood of children dropping out of school significantly increases when the language of instruction is not the same as the language spoken at home (Mehrotra, 1998, pp. 12-13). Indeed, in an analysis of the 1998 Demography and Health Survey in Turkey, Smits and Hoşgör (2006) found that the inability of the mother to speak Turkish was a key factor in explaining the non-enrolment of girls in Turkey. That result held even though they controlled for such factors as regional variation, family size, mother's attitude towards gender roles, and mother's education.

Thus, if Turkish is to remain the sole medium of instruction for basic education it is incumbent on the government to provide additional educational resources to those areas where the language spoken at home is not Turkish, such that the inherent inequality of opportunity to achieve the basic education capabilities is mitigated. Similarly, in those areas where traditional parents are particularly resistant to the idea of sending their daughters to school once they reach the age of puberty it may be necessary to improve the quality of local multi-grade (where one teacher teaches a number of different grades simultaneously) schooling, rather than boarding schools or bussing. Government policy has prioritized the provisioning of bussing and boarding in rural areas where the local village schools usually only cover Grades 1 to 5. Clearly that is ineffectual if the aim is to give tradition-bound parents no reason not to let their daughters achieve the basic education capabilities.²¹ In other words, the root of the problem may still be explained in terms of the absence of the resources necessary to permit all children to achieve the basic education capabilities. This is in keeping with the overall capabilities approach that informs this chapter. Namely, it is often necessary to *unequally* distribute educational resources of sufficient quality in order to ensure the *equal* opportunity to convert those resources into the basic cognitive functionings.

7. CONCLUSION

In this chapter we have evaluated educational policy in Turkey based on the capabilities approach defended by Amartya Sen and Martha Nussbaum. We have argued that the value of education must be gauged in terms of the achievement of those cognitive functionings that are the necessary, but not sufficient, preconditions for achieving other essential functionings. Mere resource possession, even if it elevates a person out of income poverty cannot adequately compensate for a shortfall in those cognitive functionings – resources in themselves cannot, for example, enable a person to understand and enforce his or her legal rights. Thus, unlike the human capital approach with its emphasis on resource growth, the capabilities approach demands that all individuals are able to complete at least the basic education cycle. Furthermore, the capabilities approach aims for equality in the opportunity to achieve the basic set of cognitive functionings, rather than simply equality in the provisioning of schooling resources.

We have seen that when compared with low and middle-income countries, Turkey lags behind in terms of mitigating capability deprivation in general, and educational deprivation in particular, in spite of its comparatively good showing in terms of income poverty and income inequality. That is consistent with a public policy emphasis on the accumulation of resources to the detriment of what people are actually able to do with

²¹ Public policy makers, it seems, now realize that it was a mistake to centralize schools in rural areas (Dulger, 2004, p. 17). Moreover, experience suggests that multigrade schools with the right inputs can be cost effective and even of higher quality than single grade classes (World Bank, 2000, p. 75).

those resources. With the recent extension of compulsory education to eight years we might expect that there has been a departure away from evaluating education solely in terms of macro-level and micro-level income growth. However, we have found that poor and especially female children are not achieving the basic set of cognitive functionings. This is because they are not completing the basic education cycle or they are graduating with at best a minimal proficiency in mathematics, science, reading and problem-solving. This, we have argued, is largely due to the poor targeting and quality of schooling resources, coupled with an over-reliance on the legal coercion of attendance.

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