# The Challenges of Education in Brazil<sup>1</sup>

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### **Abstract**

Education in Brazil has changed intensely in the last several years. Access to basic education is nearly universal, secondary education has been expanding very rapidly, and also higher education, at the undergraduate and graduate levels. However, there are serious problems related to quality, equity, and inappropriate use of resources. Some of these problems are related to the fact that Brazil started to develop its education institutions very late, and did not build strong teaching and academic professions that could provide the necessary support for education policies committed to equity, quality and efficiency. After a historical overview, the paper presents some of the main policy innovations of the last several years, and some of the items in the policy agenda of the new Brazilian government.

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#### Sumário

A educação brasileira mudou muito nos últimos anos, com a universalização quase total do acesso à escola, a expansão do segundo grau, e o crescimento do ensino superior e da pós-graduação. O Brasil gasta, anualmente, cerca de 5% do PIB em educação, proporção equivalente a muitos países desenvolvidos, e uma das maiores da América Latina. No entanto, persistem muitos problemas, sobretudo em relação à qualidade do ensino, que afeta principalmente as populações de menor renda. Este texto, escrito como introdução a uma série de seminários sobre a educação brasileira promovido pelo Centro de Estudos Brasileiros e Departamento de Estudos Educacionais da Universidade de Oxford, procura analisar as raízes históricas do subdesenvolvimento brasileiro em matéria de educação, descrever a situação atual, e discutir tanto as políticas mais recentes quanto as que estão sendo implementadas pelo novo governo brasileiro.

Na parte histórica, o texto compara o desenvolvimento tardio da educação brasileira com a experiência de países da Europa Ocidental, Japão e Nova Inglaterra, que já haviam universalizado a educação básica ao final do século XIX. Os fatores que permitiram estes resultados foram a importância dada pela sociedade à educação, o papel das instituições religiosas, sobretudo protestantes, e a implantação de sistemas de educação pública pelos nascentes Estados Nacionais. A educação também acompanhou o desenvolvimento das cidades modernas e das indústrias, mas não se pode dizer que ela se explique só por isto. Ao analisar a experiência brasileira, importância especial é dada ao fato de o Brasil não ter conseguido estruturar uma profissão docente e acadêmica com as características que seriam necessárias.

Na análise de políticas, o texto apresenta e comenta as ações governamentais mais significativas dos últimos anos, como o FUNDEF, a implantação dos sistemas de estatística e avaliação educacional do INEP, de estímulo à expansão do ensino médio, e o crescimento da pós-graduação. Em relação à políticas mais recentes, texto comenta a prioridade dada ao combate ao analfabetismo, e a intenção do novo governo de aumentar os recursos para a educação e ganhar o apoio da comunidade docente e acadêmica para a melhoria e o fortalecimento da educação do país.

Education in Brazil has changed significantly in recent years, but is still far from satisfactory. In this introductory text, we present a broad view of the origins of Brazilian education, and, from there, we try to identify some of its key features. This should allow us to better understand the current conditions and predicaments, and open the way for discussing some of the policy options that are being tried, or may be available. Education issues are always controversial, and this paper hopes to help to enhance and clarify some of the matters of contention.

### The central issues

Until recently, there seemed to be a consensus that the problems of Brazilian education were that there were not enough schools, that children abandoned education in large numbers at early ages, and that the government did not spend enough money in education. It was necessary to build more schools, to pay the teachers better, and to convince families to send children to school. It took some years of careful demographic analysis and convincing to convince policy makers and public opinion that, in fact, children do not drop out from school in significant numbers before they are fifteen or so. The main problems were quality and retention, that is, the tradition of holding the children back when they do not perform as expected in school exams, a widespread practice in Brazil (Fletcher 1984; Klein and Ribeiro 1991). With the slowdown of demographic expansion and migration, Brazil started to face, for the first time, problems of empty classrooms. Today, there are 43.8 million students enrolled in basic education<sup>2</sup>, for a total population of about 36.5 millions in the corresponding age bracket of 7 to 17, an unrecognized excess of more than 7 million places<sup>3</sup>.

<sup>&</sup>lt;sup>2</sup> A question of terminology: Brazilian education is organized today in two main blocks. The first is "basic education," which comprises eight years of "fundamental education", for children ages 7 to 14, and three years of "secondary education" officially called "middle education" (educação média) for youngsters ages 15 to 17. "Elementary education" is used sometimes to refer to the first four years of fundamental education. The next block is higher education, divided into a first professional, graduate level, with course programs lasting from three to six years, granting Bachelor's degrees; and a post-graduate level for students working for master and doctoral degrees. In an effort to adjust to the American terminology, the first level is often translated, in English, as "undergraduate", and the second, as "graduate". Besides, there is a pre-school level, for children under seven, and a wide array of specialization, non-degree post-graduate courses, lasting for a year. Post-secondary, non-university courses also exist, but in small numbers.

<sup>&</sup>lt;sup>3</sup> There is a large discrepancy, however, between the information provided by the 2002 school census, carried on by the Ministry of Education, and the 2001 household survey carried on by the Brazilian Institute for Geography and Statistics (IBGE). The figures for fundamental education are, respectively, 35.1 and 31.8; and, for secondary education, 8.7 and 7.6 million. These discrepancies can be explained, at least in part, by the fact that the school census takes place early in the year, and the household survey, in September and later, with many students

Figure 1 - School enrollment by age and gender, 20014

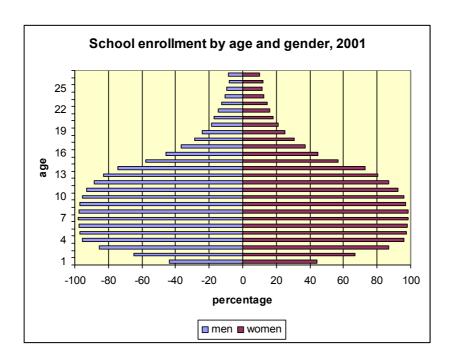
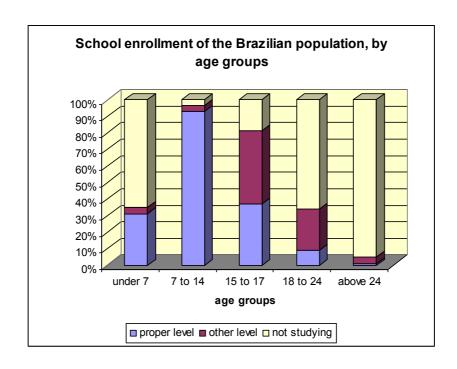


Figure 2 – School enrollment by age groups<sup>5</sup>

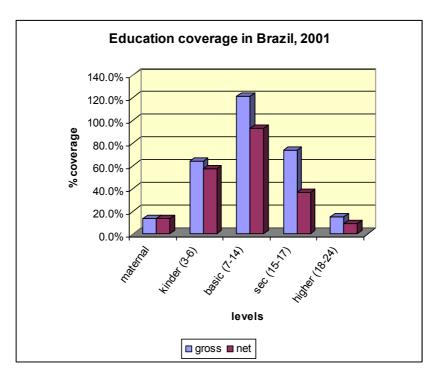


dropping out during the year; and by over-reporting by school administrations (probably), or under-reporting by families (less likely).

<sup>&</sup>lt;sup>4</sup> Data from the National Household Survey, Brazilian Institute for Geography and Statistics (PNAD/IBGE), 2001.

<sup>&</sup>lt;sup>5</sup> Data from the National Household Survey (PNAD), 2001.

Figure 3 – Education coverage by education level, 2001<sup>6</sup>



As we see in Figure 1, practically all children between ages of seven and ten are in school. Therefore, access is no longer an issue. However, as shown in subsequent Figures, many students are not at the level they should be, and there are too many adults occupying the places of young dropouts. We see in Figure 2 that most youngsters between the ages of 15 and 17 are not in secondary education, as they should, but are lagging behind. Because of retention, there are about 7 million students in fundamental education that are older than the reference group, and should not be there (giving a gross enrollment rate of 121%) (Figure 3). In secondary education, about half the students are 18 years or older, and should have already left school. In higher education, which still enrolls only 9% of the age cohort (18 to 24), about half the students are aged 25 or older.

These distortions are related to a tradition of bad quality instruction that limits the student's ability to learn, as revealed by the Brazilian National Assessment of Basic Education and other evaluations (Crespo, Soares, and Mello e Souza 2000; OECD Programme for International Student Assessment 2001), and to the high dropout rates that occur when the young reach adolescence. In 2001, by age 16, 19% of Brazilian youngsters were already out of school; by age 18, 43%. Very simply, a large number of

<sup>&</sup>lt;sup>6</sup> Data from the National Household Survey (PNAD), 2001.

students go through school without learning to read and write properly. There is a very serious problem of teaching teachers how to teach (Oliveira and Schwartzman 2002), and of reaching out to those who were left behind, to recover the time lost and to be brought the level of their age peers.

There is also a problem of relevance of content, which affects mostly those in secondary schools, but also substantial segments of higher education. Are the students learning what they need in order to help them to enhance their personalities, and to enter the labor markets? Is Brazil graduating the specialists, researchers and innovators it needs to participate in the modern "knowledge economy"?

The first question touches the classic dilemma of choosing between general and vocational education. It is a difficult question, because it involves both social discrimination, when students are "tracked" to a particular education path that keeps them in lower status jobs, and the effective provision of marketable skills to persons who may otherwise not be able find work. The international experience shows that simple content differentiation will not provide marketable skills, if there is no clear linkage between technical schools and future employees. On the other hand, when these linkages are present, vocational education could provide better opportunities in a stratified job market, even at the price of long-term segmentation (Shavit and Müller 2000). Brazil has obtained some success in vocational education for small segments of its population, with access to the training schools of the industrial and business associations, but attempts to extend these experiences more widely have not succeeded. A similar difficulty arises with higher education, where the absence of post-secondary, short-term alternatives to full university degrees end up creating enormous waste, by persons trying and later abandoning their university careers. Here again, the simple creation of short-term course programs, as the poor-man alternative to full diplomas, tends to be rejected, and does not prosper.

How much education does Brazil need, and for what purpose? We can readily agree that universal, good quality basic education is a requisite and a moral requirement of all modern societies, for the sake of social equity, cultural values, and economic functionality. We can also agree that governments should get involved in supporting higher education, as a source of knowledge and competence for society as a whole. However, even in advanced economies, only a segment of the job market requires highly specialized competencies, and most higher education is related to the provision of general attitudes and skills. The demands of educators and academics for more courses, better salaries, and more public subsidies at all levels, tend to be endless, and it

is necessary for governments and decision-makers to know what are the limits, and where to stop.<sup>7</sup>

The problems of equity deserve special attention. Brazil is known for having one of the world's highest levels of income inequality, and this is strongly related to education (Ferreira and Paes de Barros 2000). Brazil is also a multi-racial society, with half of its population being classified as "non-white", and there are strong correlations between ethnic origins, income and educational opportunities. On the whole, in 2001, the white population had 5,75 years of school, and the non-white, 4.04; the average income of white persons was twice as large as that of the non-whites. Today, for the younger generation, the chances of whites and non-whites to be in school are practically the same for all age groups (Figure 4). This does not mean, however, that ethnic differences do not persist. Non-whites are poorer, live in poorer neighborhoods, and have less educated parents. Regional differences are larger still, going from 5.59 years in school in the Southeast (which includes São Paulo and Rio de Janeiro), down to 3.71 in the Northeast. At age 11, the chances of being in a school are practically the same in the Northeast and the South West – 97.3% and 98%. At age 16, however, the difference is already important - 77.7%, compared with 86.0%.

As a rule, public schools in poor regions, municipalities and neighborhoods tend to be of worse quality, and school achievement depends heavily on the family's economic, social and cultural background. Middle and upper class families send their children to private basic and secondary schools, which are of better quality, and prepare them to be admitted to the most prestigious, public (and free) higher education institutions. Students from poorer families, if they get to higher education at all, can only enter the less prestigious courses in public universities, or, more often, they have to go to private institutions, where the courses are also of low prestige and quality, for which they have to pay.

<sup>&</sup>lt;sup>7</sup> For an assessment of the links between the supply of higher education and the demands of the labor market in Latin America in recent years, see Schwartzman (2002). For the inflation of higher education in England and its negative implications, Wolf (2002). For the multiple functions and differentiation of higher education in Latin America and Brazil, Castro and Levy (2000), Schwartzman (2001).

<sup>&</sup>lt;sup>8</sup> The ethnic or race classification is obtained by asking the persons to place themselves into the categories of "white", "black", "mixed" ("pardo"), "native", and "oriental", in the Brazilian national household surveys and censuses. This question is meant to classify the population according to one's self-described skin color, as a surrogate for race or ethnicity (with Brazilian natives and Orientals as sub-groups within the "yellow" category). For this tabulation, we added the blacks, of about 5.6% of the respondents, with the "pardos", 40.4%, to create the "non-white" category. The natives correspond to 0.1% of the population, and the Orientals, mostly of Japanese descent, 0.5%. In the 2001 survey, 53.4% of respondents defined themselves as white. See, for a discussion of this classification, Telles (1998), Schwartzman (1999).

Figure 4 - School enrollment by age and ethnicity, 20019

We can summarize this overview by stating that the main problems with Brazilian education are those related to the quality and retention of students in the public systems. One major consequence of these problems is the inequity in the access to good quality education, which affects mostly the poorer segments of the population; the other is the large number of persons who leave education before getting their certificates, without acquiring the knowledge and skills they were supposed to have. Finally, the distortions created by bad quality and retention led to a huge waste of resources spent on keeping in schools older students who should not be there.

## The origins

How did education in Brazil come to its present situation?

By the early 20<sup>th</sup> century, most of the population in Western Europe, New England and Japan was already literate, while in Brazil and most other countries in the world, education reached only a tiny minority of the population.<sup>10</sup> The achievement of mass literacy can be explained by a combination of different elements. The Western

<sup>&</sup>lt;sup>9</sup> Data from the National Household Survey (PNAD), 2001.

<sup>&</sup>lt;sup>10</sup> See, for Europe, Vincent (2000) and Venezky (1991). On France, Furet and Ozouf (1977). On Japan, see, among others, Godo and Hayami (2000). On the United States, Lockridge (1974), Monaghan (1988), Stevens (1990). On 19<sup>th</sup> century Brazil, a detailed, but not very consistent source of information is Almeida (1989). See also Moacyr (1939).

religions - Judaism, Christianity, and Islamism - place the reading of sacred books at the core of children's education. In the Jewish and early Protestant traditions, learning took place in the family or in small community schools, and was part of the building and maintenance of cultural identity in face of an alien or hostile environment. Throughout the Muslim world, reading the Quran was and is an essential component of one's religious and moral education. Not all these traditions, however, succeeded in converting religious reading into skills that could be used outside the religious and ritual realms<sup>11</sup>. For this, other conditions were necessary, including the availability of printed materials, and the need to use scriptures and figures to communicate, to keep records, to do business and to work.

Grassroots and community organization, moreover, were not enough. The spreading of basic education and literacy schools in Europe was, at first, the work of the established churches, Protestant and Catholic, as part of the Reform and Counter-Reform movements, and became later the task and responsibility of the emerging nation-states. France under Napoleon epitomizes the model that so many countries tried to imitate: a nation coordinated by a strong central government that created complex institutions to involve and mobilize all citizens in an integrated and cohesive society. In its origins, a central institution of the modern nation-state was universal military conscription; also important were a unified and homogenous national language, and education institutions able not only to provide everyone with reading and writing skills, but also with the moral and civic values deemed necessary for the Nation.<sup>12</sup>

No modern state, however, could start this work from zero. In France, the Napoleonic state built its education institutions upon a complex network of schools created and maintained by the Church during the Ancient Regime, and on traditions of popular education that had existed in many places (Furet and Ozouf 1977). Different nation-states dealt with the Church and the diverging popular education and linguistic traditions in different ways, sometimes in conflict, sometimes in cooperation, often through cooptation. An important part of this history is the development of the teaching profession, which helped to transform the more spontaneous and traditional forms of

<sup>&</sup>lt;sup>11</sup> "In Muslim countries it is quite common to be well versed in the Quran Sharif, taught in the indigenous religious schools called madrasas. Unfortunately this learning is purely rote. Hence, while students appear to be able to read the Quran Sharif with fluency, they still often cannot read the Arabic script when written elsewhere. This learning cannot be transferred to reading other books or doing math." (Samant (1996)).

How much of the old Nation State imagery remain, or should be maintained, in these times of globalization, is a question that deserves a specific discussion, since its implications for contemporary education can be very significant. See, among others, Archibugi and Lundvall (2001), Lenn and Moll (2000), Carnoy (1999).

education and learning into a network of organized and standardized schools<sup>13</sup>. Industrialization and the development of the modern cities played also a part, but their role was not very obvious. David Vincent argues, for instance, that early literacy was a "luxury" made possible by economic progress, more than a condition for it, although, once it existed, it helped in the growth of industry and trade (Vincent 2000). In fact, there is some evidence that, in England and France, industrialization and urban concentration led to the temporary deterioration of the educational standards of previous years. Education could not develop in conditions of extreme poverty, but, once it started, it became a central ingredient in the fabric of modern societies.

Portugal, Brazil's colonial power, like Spain, was not touched by the Reformation movement. The Catholic Church, which exerted strong control on the country's universities through the Jesuit order, did not have to respond to the threat of Protestantism through the creation of schools for the common people, and this might help to explain why literacy did not spread as much in Portugal as it did in other European countries.

By the mid 18<sup>th</sup> Century, under the Marquis of Pombal, the Jesuits were expelled from Portugal and Brazil, in an effort to bring the country in line with the European enlightenment. In Portugal, the reform lead to the first effort to create a national education for elementary education, which marked also the beginning of the teaching profession in that country (Nóvoa 1987). Nothing similar happened in Brazil, where the unintended consequence of the reform was the dismantling of most of the Catholic education that existed at the time.<sup>14</sup>

In the early 19<sup>th</sup> century, the Portuguese court moved to Rio de Janeiro, fleeing Napoleon, and in 1822, Brazil became independent under a Portuguese king. The first higher education institutions in Brazil are from these early years – a military academy in Rio de Janeiro, two law schools in São Paulo and Recife, two medical schools in Rio de Janeiro and Bahia. In 1838, the first public secondary school, the Colégio Pedro II, was

<sup>13</sup> The classic reference for the analysis of these interplays between State, Church and the teaching profession in the establishment of national education systems in Europe is Archer (1979)

<sup>&</sup>lt;sup>14</sup> There is no information, however, on how much education existed in Brazil in those years, the simple answer being "not very much". According to one source, about five hundred Jesuit priests left Brazil in 1759, closing 17 schools, 36 missions, and several junior seminaries and elementary schools (Bello (2003). Other religious orders and secular priests remained, however. Later, the Jesuits were allowed to return, and the Church continued to play an important role in Brazilian society, including in education, in spite of constant conflicts with the country's political elite. On the Pombal reform and its impact on education in Brazil, see Maxwell (1995), Paim and Crippa (1982) Andrade (1978).

established in Rio de Janeiro.<sup>15</sup> Elementary education, when existed at all, was left to the governments of the provinces, private tutors and parochial priests, except in the country's capital, where some rudiments of a system of public education began to take shape. The Church was also responsible for several religious establishments, including the famous Caraça school in the mountains of Minas Gerais, kept by Lazarist priests, which was, for many years, one of the few alternatives for young men willing to study but unable to go to Rio de Janeiro or abroad.



Figure 5 - Colégio Pedro II, Rio de Janeiro, 1861<sup>16</sup>

Colégio Pedro II, 1861, MG, Museu Mariano Procópio.

<sup>&</sup>lt;sup>15</sup> For the higher education institutions, Schwartzman (1991); for the Colégio Pedro II, Prefeitura do Rio de Janeiro (2003)

<sup>16</sup> http://www.rio.rj.gov.br/multirio/historia/modulo02/criacao\_pedroii.html

Figure 6 - The Caraça School in Minas Gerais<sup>17</sup>



Brazil, in the 19<sup>th</sup> century, was a predominantly rural society, run by a centralized empire trying to adopt the trappings of European nation-states, without, however, the resources to reach out to the population in the impoverished and distant provinces, where the economic cycles of sugar and gold had long since come to an end. This population was formed by a small elite of white Portuguese descendants, black slaves, the remnants of the indigenous population, and large numbers of mixed-blood, former slaves and poor free men living out of subsistence farming or squatted around the largest ports and cities of Salvador, Rio de Janeiro, and Recife (Franco 1969; Mattoso 1988). This demographic and cultural picture had begun to change by the end of the 19<sup>th</sup> century, with the influx of European and Japanese immigrants to São Paulo, Rio de Janeiro, and other Southern states, first to replace the slave labor in Brazil's latest cash crop, the coffee plantations, and later to populate the country's main cities. By 1900, a third of the population in Rio de Janeiro and São Paulo had been born outside Brazil. At that time, about a third of the youngsters in Rio de Janeiro attended some kind of elementary or primary school, one in four in a private institution.

By then, the Empire had been replaced by a Republican regime, and new educated elites started to agitate in favor of a modern nation-state which would not just mimic the European institutions, but could really incorporate the population into a coherent and integrated national community. In the state of São Paulo, for the first time, a new conception of public education started to take root. In the 1890s, as part of a

<sup>&</sup>lt;sup>17</sup> http://www.viajar.de/pages/minas/sg\_minas45.html

remarkable effort to modernize the state, formerly scattered teaching units were brought together into "school groups", built according to the most advanced architectural designs of the time. The students were organized according to their age and proficiency; and, for the first time, a multi-serial and sequential study program was put in place (Souza 1998). New teacher training schools (*escolas normais*) were created and transformed, trying to introduce better teaching methods and modern contents (Nagle 1974; Tanuri 1979). Similar reforms were attempted or started in Bahia, Minas Gerais and the capital city of Rio de Janeiro.

Figure 7 - Escola Modelo da Luz (Grupo Escolar Prudente de Morais), established in São Paulo in  $1895^{19}$ 



In 1906 the Federal government enacted new legislation for primary education, reorganizing the schools, and proclaiming the virtues of vertical handwriting, supposed to be much more efficient, rational and adequate for large-scale teaching of writing skills (Faria Filho and Galvão 1998). However, throughout the First Republic (1889-1930), primary and secondary education remained the responsibility of local and state governments, and only about 25% of the population, at most, were literate. <sup>20</sup> German, Italian, and Japanese immigrants created their own schools, sometimes with the support

<sup>&</sup>lt;sup>18</sup> Even today, the expression "grupo escolar" is used in Brazil to refer to elementary schools providing the first four years of basic education. Other initiatives of the period included the creation of several higher education schools and research institutes. São Paulo was already, at the time, the world's largest coffee producer., and Brazil's richest region.

<sup>&</sup>lt;sup>19</sup> For a portfolio of pictures and the history of the "grupos escolares" in São Paulo, see Centro de Referências da Educação Mário Covas (2003)

<sup>&</sup>lt;sup>20</sup> The information comes from a municipal census in Rio de Janeiro of 1906, and the national census of 1900, as reported in Directoria Geral de Estatistica (1916).

of the governments of their countries of origin, or foreign priests<sup>21</sup>. In 1924, a Brazilian Association for Education (Associação Brasileira de Educação) was established in Rio de Janeiro with participants from several states and played a very important role in bringing education to the center of the national agenda (Paim 1981).

It was only with the so-called "Revolution of 1930", which brought Getúlio Vargas to power and started a new period of political centralization, that education finally appeared as a national priority. The new government established, for the first time, a Ministry of Education and Culture<sup>22</sup>, and intellectuals who had been involved in the regional educational reforms and education campaigns published a famous "manifest of the pioneers of the new education" (Azevedo 1932), which would set the education agenda for the years to come. Movements for a "new education" and a "new school" had been present in European and American educational circles for several decades, with ideas taken from the works from Wilhelm Dilthey, Édouard Claparède, Adolphe Ferriere and others, and propagated by institutions like the "Ligue Internationale pour l'Éducation Nouvelle". In the 1920s, these ideas dominated the education debates in Portugal (Nóvoa 1987). The pioneers' proposals dealt both with the way education should take place, through the active participation of the student in the learning process, and on the way Brazilian education should be organized, through the establishment of public universities, free, universal, mandatory and basic education, and the education of teachers in university-level institutions.

There is an extensive literature on the ideas and work of these pioneers, and on what the government of Getúlio Vargas and his education ministers, Francisco Campos and Gustavo Capanema, did or did not achieve in matters of education.<sup>23</sup> The proponents of educational reform were deeply divided on ideological and doctrinaire grounds, from authoritarian fascists (Francisco Campos) and ultramontane Catholics (Alceu Amoroso Lima) to American-type pragmatists (Anísio Teixeira), believers in the scientific powers of the new pedagogy (Lourenço Filho and Fernando de Azevedo), and Marxists (Paschoal Lemme). Part of the conflict had to do with the pact signed between Vargas and the conservative Catholic Church, according to which Brazilian education

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<sup>&</sup>lt;sup>21</sup> Before the War, there were about five thousand German teachers working in a well integrated school system spanning through the states of Rio Grande do Sul, Paraná and Santa Catarina. In São Paulo, in 1917, there were 37 German schools, and 51 Italian ones. The Japanese started to arrive in earnest in the mid 1920s, and by 1936 there were 310 foreign schools in the state of São Paulo, of which 215 were Japanese. Bittencourt (1990).

<sup>&</sup>lt;sup>22</sup> In the 19<sup>th</sup> century, education was the responsibility of the Minister of Interior, or the Empire. In the first Republican government, there was a short-lived "Ministry of Public Instruction, Postal Service and Telegraphs".

<sup>&</sup>lt;sup>23</sup> See, from the pioneers themselves, Azevedo (1932), Teixeira (1968), Lourenço Filho (1967), Azevedo (1971). For an overview, Schwartzman, Bomeny and Costa (2000). See also Brandão (1999), Bomeny (2001)

would be reorganized under the Church's guidance and direction<sup>24</sup>, which was strongly opposed by the more liberals reformers and on the left.

In the end, what prevailed was none of those principled doctrines, but the bureaucratic and administrative instincts of Minister Capanema, infused with the nationalist and conservative values of the time. The Vargas government created a very centralized education bureaucracy for higher education, and made a significant effort to shape and control basic and secondary education from above, without, however, taking the responsibility for the management and administration of the schools, which remained under the responsibility of state and municipal authorities, or in private hands. Initiatives in the period included the creation of Brazil's first research center on education, the National Institute for Pedagogic Studies (INEP), to make education more scientific and technical (Mariani 1982; Xavier 2000); and the reform and upgrade of the old Normal School, as the new Instituto de Educação in Rio de Janeiro, expected to become Brazil's version of the French École Normale, and the model for the country. More controversial were the efforts to mobilize the young and infuse them with nationalist patriotic ideals, through religious education, the teaching and singing of national and patriotic hymns<sup>25</sup>, and, at a later stage, the forceful closure of the immigrant's schools, and the prosecution of those who taught the children in their modern tongue (Bittencourt 1990).

In this period, primary or elementary education, which was supposed to be mandatory and universal, lasted for four years, from ages 7 to 10. It was followed by the gymnasium, then considered as as secondary education, also for four years. Finally, there was a "college" level, lasting two to three years, conceived as a preparatory course for the universities. The Capanema Ministry spent a large effort in the elaboration of the curriculum of secondary education as an European-like gymnasium or lyceum, which would provide humanistic and scientific education to youngsters aspiring to enter the universities. Most students, however, were expected to get a practical education in agricultural, industrial, and commercial activities, without going into higher education. Nevertheless, there were no places to prepare and train teachers for these courses. The industrialists created their own technical schools, which were considered of good quality and adjusted to their needs, and remained outside the control of the education

<sup>&</sup>lt;sup>24</sup> The pact signed between Getúlio Vargas and the Catholic Church for the control of the education institutions is documented in Schwartzman, Bomeny and Costa (2000). For the Brazilian Catholic Church conservative renewal in those years and its role in education, see Salem (1982).

<sup>&</sup>lt;sup>25</sup> This was a special project of composer Heitor Villa-Lobos, who would bring to public stadiums thousands of children in massive choirs, singing hymns and national popular music.

authorities;<sup>26</sup> commercial education grew in the private sector, as a second-best alternative to children coming from lower social strata; and agricultural education never developed.

On higher education, the first university legislation was passed in 1931, establishing a combination of French-style professional schools and an Italian type of "Faculty of Philosophy, Sciences and Letters", which was supposed to be the place for research, scholarship and teacher education for secondary schools. Here again, the Federal government tried a very centralized system, with laws defining the contents of courses and careers, a National University serving the model for the whole country, and a strict system of controls and supervision of local and private institutions. However, the only national university to be created before World War II was the one in Rio de Janeiro, through the aggregation of the city's old professional schools and a new Faculty of Philosophy, Sciences and Letters. The state of São Paulo, in competition with the Federal government, created its own university first, according to the same model, but with a much stronger scientific and academic content. For its Faculty of Philosophy, European professors were recruited in France, for the social sciences; in Italy, for physics and mathematics, and in Germany, for chemistry and the biological sciences Through their work, the University of São Paulo gave origin to the most important traditions of scientific and technological research in the country, and remains Brazil's leading academic institution (Schwartzman 1991).

The conceptions, institutional frameworks and practices established during those fifteen years of the Vargas regime, 1930-1945, would shape Brazilian education for many decades. After the war, Brazil entered a period of rapid modernization, economic growth and urbanization, which brought with it a growing demand for education. The federal government responded by creating a network of federal universities, at least one in each state, and state governments and municipalities expanded their schools systems of elementary and secondary education. Private education expanded also, catering both to the elites, with selective elementary and secondary schools, and to the lower middle classes, opening cheap alternatives for those who would not pass the entrance examinations to public universities, or wanted to combine study and work.

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<sup>&</sup>lt;sup>26</sup> The early attempts, and failure, of the Ministry of Education to bring Swiss teachers to create technical schools along the European traditions are described in Schwartzman, Bomeny and Costa (2000), chapter 8. Until today, the business federations maintain their own systems of technical education (Serviço Nacional de Aprendizagem Industrial, SENAI, and Serviço Nacional de Aprendizagem de Comércio, SENAC).

It would take half a century from the Manifest of the Pioneers of the New Education of 1932 for the institutional framework of Brazilian education to start changing again. During this period Brazil became an urban society, with communications linking the whole country, and with a large industrial sector. In spite of this expansion, education was probably less a concern in the 1950s and 1960s than in the previous decades. Earlier, there was the belief that education could change minds and souls, and was the road for social betterment. Later, economic growth, social conditions and politics took precedence; education, from a precondition for social change, came to be seen as an aftereffect. In the fifties, President Juscelino Kubitschek led an ambitious "targets program" to make Brazil a modern country, through the establishment of a modern industry, the opening of roads, the building of dams and the construction of the new capital in Brasilia. However, there was only one target related to education – technical training, with less than 4% of the investment budget (Bomeny 2002). In the same period, thanks to the international support from UNESCO and other sources, an ambitious National Center for Education Research (CBPE) was established in Rio de Janeiro, under the old institute for pedagogical studies. Many interesting studies came out of this institution, on urbanization, social stratification, social mobility but very little on education (Xavier 2000).

Some important reforms took place, however, in the 1960s and 1970s. In the late sixties, higher education was transformed, with the introduction of US-type innovations, like the credit system, academic departments, and graduate programs. In 1971, following international trends, mandatory education was extended from four to eight years, by adding the old four-year "gymnasium" to the elementary school. Secondary education, now limited to school years 9 to 11, experimented with different models and links between academic and professional curricula, without much success. In 1988, after twenty years of military rule, a new Constitution was drawn up, declaring mandatory education as a "subjective" right of every person<sup>27</sup>; establishing that all universities should be autonomous; that research, teaching and extension work were inseparable; and that all public education, basic and higher, should be provided for free. For many years thereafter, Congress and interest groups debated a new Education Law, which was finally approved in 1996, giving, in principle, much more freedom and flexibility for the

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<sup>&</sup>lt;sup>27</sup> Meaning that it was an entitlement that could be claimed in court, if necessary.

education institutions at all levels to set up their own course programs and manage their affairs.<sup>28</sup>

## Missing links: the teaching and academic professions.

From this historical background, we can try to understand why education in Brazil did not develop as in other countries. The short answer is that, by and large, Brazilian society did not have the elements that would lead its population to organize and develop its own educational institutions; and the Brazilian state, both at the national and regional levels, did not have the human and financial resources, nor the motivation to bring the population into a centralized and vertical educational system. More specifically, two crucial links between these two spheres were missing, a well-structured and organized teaching profession for basic education, and an academic profession for higher education, which could spread, implement, and foster de values of education.

In Europe, the modern learned professions evolved from the old trade guilds into large-scale, self-regulating entities, which placed limits to the absolutist powers of governments and the erratic behavior of the people, and carried on the day-to-day activities of rationalization that was the cornerstone of modern societies. The classic learned professions were Law, Medicine and, in France, Engineering; but the academic and teaching professions were also very important, and have been the subject of intense scrutiny in recent years (Müller, Ringer, and Simon 1987). In France, which was always considered the model to be followed, elite higher education remained limited to the professional *Grandes Écoles*, while the old university, closed down by the Revolution, was restored to deal mostly with teacher training and education. As described by Randal Collins, "the reconstituted university was in fact a bureau of the Central state making appointments to secondary schools and controlling a uniform curriculum throughout the country" (Collins 2000 234). In Prussia, a strong academic profession was responsible both for giving the country the best education at all levels in the  $19^{th}$  century, and for contributing to the disaster of the 1930s (Ringer 1990).

In Portugal, Nóvoa shows how a teaching profession, as distinct from the academic one, was already on the making in the late 18<sup>th</sup> Century, with its main

<sup>29</sup> This interpretation of the role of professions and intermediate organizations comes from Max Weber, but is also consistent with De Tocqueville's interpretation of Democracy in America, and its potential pitfalls.

<sup>&</sup>lt;sup>28</sup> This was the "Lei de Diretrizes e Bases", number 9,394, of December 20, 1996, also known as the "Darcy Ribeiro Law".

components being brought into place – a well defined social status, a specific savoirfaire, training institutions, common values, a legal and institutional framework. By 1794, there were 748 royally appointed professional teachers ("Mestres Reais de Leitura e Escrita") in Portugal; in Brazil, on paper at least, the number was just 179. More important than this numerical difference was that, throughout the 19<sup>th</sup> and the earlier 20<sup>th</sup> century, the teaching profession would grow and expand in Portugal, but not in Brazil. This may be related, in turn, by the fact that Brazil remained a slave-based economy and did not go through a liberal revolution like the one that took place in Portugal after independence, an echo of changes that were that were sweeping other European nations so dramatically.

It is possible to trace, in the 19<sup>th</sup> century, the early attempts to bring to Brazil the notion that modern societies should be led by enlightened and educated professions. Small groups of medical doctors, lawyers and engineers tried to convince society that they had the solution for the country's problems, and sought to guarantee, at the same time, the professional privileges and autonomy they deemed necessary for their work (Schwartzman 1991; Coelho 1999). Differently from Europe, the regulation of professional rights and privileges moved much more quickly than the creation and strengthening of the professions themselves. In the 1930s, the Vargas regime adopted the notion that society should be organized in well-regulated and hierarchical corporations, which included the labor unions, business associations, and the learned professions. Each profession would have its own educational prerequisite, to be provided or certified by the state, and all workers, businessmen and professionals would have to belong to a specific corporation, supervised by the State (Schmitter 1974; Schwartzman 1977). In practice, this attempt to organize society from above went against the movements to organize society from the bottom up, leading to weak institutions and extensive cooptation of potential leaders to political and bureaucratic power positions. For education, the consequence was the high premium given to educational credentials, creating an endless tug-of-war between those trying to get their credentials with the minimum possible cost and investment, and the government and professional corporations trying to control and limit the distribution of these entitlements.

We have seen how, in the 1930s, there were proposals to develop the teaching profession within the higher education institutions, both through the faculties of philosophy, sciences and letters, and through the academic upgrade of the old Normal Schools. This integration, however, never succeeded. Some components of a teaching profession emerged through the early efforts to modernize education in São Paulo and

Rio de Janeiro. They included a generation of prestigious professional teachers in the best known secondary schools; school directors and pedagogues educated in the new Normal Schools in Rio de Janeiro, São Paulo, Minas Gerais and a few other states; qualified priests and nuns teaching in Catholic institutions; and, of course the intellectuals that signed the manifest of the pioneers of new education. These were exceptions, however, that only confirm the rule, which was the absence of well-defined and extended teaching profession until very recently.

Two parallel trends led to the creation of a teaching profession in Brazil, the spreading of basic and secondary education and the development of institutions to provide them with professional qualifications and legal certification. In 2002, there were 2.4 million "teaching functions" in basic education in Brazil, about one million of which in state networks, another million in municipal schools, and half a million in private establishments. In addition, there were about half a million "teaching functions" in secondary education (9-11). In the past, most of the teachers in the old "grupo escolar" (today the first four years of fundamental education) had at most a secondary degree obtained in a normal school. Today, 25% of those have a higher education degree, and there is legislation requiring that they all should have such a degree in a few years' time. The consequence is the proliferation of all kinds of degree granting programs in education, most given in the evening or at distance, and of questionable quality.<sup>31</sup>

For a schoolteacher, the place to get a higher education degree varies depending on the level she or he wants to teach. For preschool and the first four years of education, the route is a school of education or pedagogy; for the remaining four years and secondary education, a degree in the subject matter is required, to be obtained in one of the old "Faculties of Philosophy, Sciences and Letters" or a science department. In the past, these faculties were supposed to be the place for research, scholarship, and teacher education, a combination that proved impossible to achieve. In time, the natural

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<sup>&</sup>lt;sup>30</sup>It is possible, in basic education, for one teacher to have two or more teaching contracts, or "functions". This means that the actual number if teachers is unknown through these statistics, collected by the Ministry of Education. The National Household Survey, however, provides independent confirmation: it found 2,378,000 teachers in basic education in 2001, 1.1 million work as public employees, a very similar result.

<sup>&</sup>lt;sup>31</sup> This statement should be corroborated by an analysis of the data from the national evaluations carried out by the Ministry of Education, which are not readily available. In some areas, like mathematics and physics, federal universities tend to fail 90% or more of their students, leading them to look for private, paid institutions where they would not have problems getting a degree. In other areas, standards are adjusted to the students' low qualifications, which are treated charitably as persons "trying to make their first steps out of poverty". (I am grateful to Graziella Moraes Dias da Silva for sharing these observations from her fieldwork).

sciences, and most of the empirical social sciences in public universities, created their own departments and research-oriented programs, where teacher education is not considered a prestigious activity. Teacher education remained important in the schools, faculties or departments of the traditional 'teaching" social sciences - history, geography - and in the schools of education and pedagogy, both in public and private institutions. These courses recruit students coming from poorer backgrounds who have difficulty getting into the more competitive fields, or old teachers returning to evening courses to get their newly required academic credentials. Very few are being trained these days to teach the natural sciences, or modern social disciplines like economics or political science.

In short, Brazil did not develop a separate system for the teacher education, and the attempt to develop it as part of the regular university system did not work very well. Teacher education was relegated to low prestige segments of higher education institutions and the private sector, and did not develop strong graduate and research programs, like the ones in the natural and more academic social sciences (economics, sociology, political science). One consequence of this seclusion of teacher education and the traditional "teaching" social sciences is that the members of this new teaching profession became, at the same time, highly organized and politically motivated, but devoid of adequate teaching competencies or knowledge in their substantive subject areas.<sup>32</sup> As required in these modern times, those in graduate programs participate in congresses, conferences, academic associations, and have their publications, with a strong predominance of different varieties of Marxist and critical theory approaches. Paulo Freire, with his views on education as an instrument for political revolution, is the preferred reference. Other important names are Pierre Bourdieu, and, among Brazilians, Octávio Ianni, Florestan Fernandes and Milton Santos. They do not know much about how to teach, or what do teach, and, very often, they do not think this is very important. As they see it, society is unfair, people are exploited, governments do not care about the teachers or about education, and not much can be done before a real and deep social transformation, or revolution, takes place<sup>33</sup>.

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<sup>&</sup>lt;sup>32</sup> See, on the historical separation of education from the mainstream social sciences, Dias da Silva (2002). On the emergence and characteristics of the schools of education, Bomeny (1994). On the broader issue of political participation and mobilization of intellectuals and professionals in Brazil, see Schwartzman (1991) and Miceli (1979)

<sup>&</sup>lt;sup>33</sup> For an overview of the field of sociology of education as practiced by education specialists in Brazil, which confirms these observations, see Dias da Silva and Costa (2002). On Paulo Freire, Paiva (2000). For the perception of teachers about literacy and their own responsibility, Oliveira and Schwartzman (2002); for samples of the ideological content of the education scholarship in Brazil, Gadotti (1996), Saviani and Mendes (1983).

The development of an academic profession for higher education started in the late 1960s, with the creation of academic departments and the expansion of public universities that took place in the following years. Before that, teaching in higher education was a minor, but prestigious activity for persons who worked mostly in their own professions, as lawyers, doctors, dentists or engineers. Except for a few medical schools and sections of the University of São Paulo, there was no research nor resources or installations for full-time academic work.

Starting in the late sixties, however, thousands of teaching jobs in higher education were opened to staff the new institutions being created to respond to a growing demand for enrollment coming from the middle classes. The private sector chose to work mostly with part-time instructors; in the public sector, however, full-time employment became the rule (Figure 8). Since the sixties, about 70,000 teachers and professors were recruited for the Federal universities; by 2001, about a third had already retired, having remained active for about 22 years on average (Figure 9)<sup>34</sup>.

This rapid and uncontrolled expansion, plus early retirements, had several important consequences. First, the financial cost of public higher education soared, placing a severe limit on the government's ability to continue to respond to the demand for higher education, and to keep the salaries above inflation. Second, only a small percentage of those hired had the necessary training and education needed for high-level academic work. To increase quality, new legislation was passed linking promotion and salary increases with higher academic degrees, leading to an inflationary expansion of specialization and master's programs.

<sup>&</sup>lt;sup>34</sup> The dramatic increase in early retirements around 1995 can be explained by the fear that the government would curtail the retirement privileges of civil servants. It did not happen at the time, but the issue is again in the agenda.

Figure 8 - Academic professionals, by institutional ownership

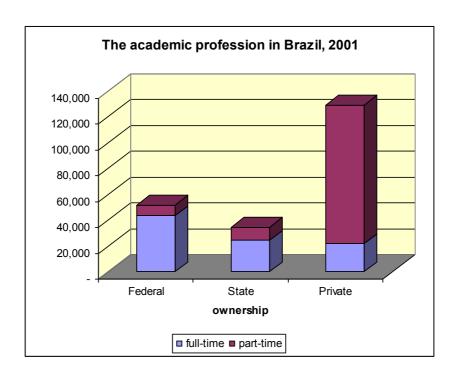
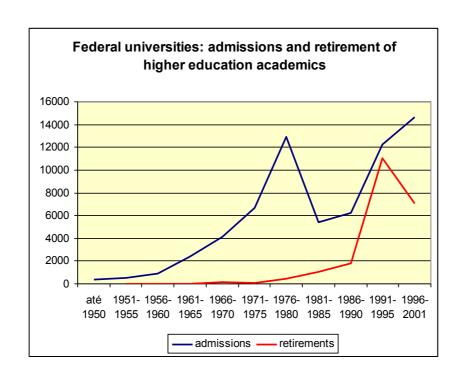


Figure 9 – Admissions and retirements in Federal Universities<sup>35</sup>



<sup>&</sup>lt;sup>35</sup> Tabulated from from the Federal government, "Sistema Integrado de Administração de Recursos Humanos: (SIAPE). I am grateful to Walterlina Brasil for making this data available to me.

Because of these developments, the Brazilian academic profession is now highly stratified. It includes a small, but significant number of persons who are well trained in Brazilian and foreign universities, have full academic credentials, and run the main graduate departments and research centers in the best public universities. There is a large number of part-time teachers working in private institutions, more identified with their specialized professions than with academic life. In between, there is a large body of full-time academics working in public institutions, without the full credentials to get the prestige and resources of advanced research, and without strong links to outside professions. Members of this segment tend to feel frustrated by their career limitations, are strongly organized in teacher's unions and associations, and play a major role in the political life of their institutions and the higher education sector (Schwartzman and Balbachevsky 1996).

The implications of these developments are paradoxical. With the delay of a century or more, Brazil has now sizeable academic and teaching professions, which could play a crucial role in the building of well-structured and competent education institutions at all levels. But this new social actor, overall, feels alienated and dejected. It could be argued that, without their support, no improvement in education is possible. At the same time, one may wonder whether it is still possible, in the 21<sup>st</sup> century, to try to rebuild the old academic professions that served so well the in the development of education in the European nation-states.

## **Recent policies**

Between 1995 and 2002, for the first time since Gustavo Capanema in the 1930s, Brazil had a Minister of Education, Paulo Renato de Souza, who was not a politician, but an economist and former rector of one the country's leading universities, the University of Campinas, and who served for two full administrations. Some of the innovations of this period were the rehabilitation of the old National Institute for Educational Research (INEP) as an office for education statistics and evaluation; and the establishment of a National Fund for Basic Education (FUNDEF), to reduce the regional differences and set a floor for state and municipal expenditures on fundamental education.

INEP became responsible for the reorganization of Brazil's education statistics and the implementation of three large systems of education assessment – SAEB, the assessment system for basic education; ENEM, a national exam for students completing secondary education; and the national examinations for undergraduate programs, known as "Provão". Part of this development was the emergence of a new generation of

education specialists, trained in statistics and psychometrics, who are providing Brazilian educators and policy makers with new and better instruments and information for their policies..

The Brazilian Constitution of 1988 determines that the Federal government should spend 18% of its resources on education, and State and local governments, 25%. FUNDEF was established to make sure that this money is actually spent on education and to establish a floor, through compensations, for public expenditures per student and per teacher for the whole country. One of the effects of FUNDEF was to stimulate the involvement of local municipalities with basic education, reducing the size and bureaucracy of state education administrations (Castro 1998; Kolslinski 2000).

Other policies of the period included the development of new curricular guidelines for basic and secondary education, and several programs to provide schools with managerial, pedagogic and material resources to improve their performance - schoolbooks, lunch, and cash<sup>36</sup>. This was also a period of an unprecedented expansion of secondary education, caused at least in part by the concerted efforts to reduce retention of non-achieving students in the first years of their school life. For the poorest segments, the government created a large program to pay families to send and keep their children in school<sup>37</sup>.

These actions, combined with programs implemented by the state secretaries of education in many regions, led to an increase in enrollments in pre-school, fundamental and secondary education, more resources for teacher training and salaries, and more equipment and resources for schools. Student flow was improved through controversial policies of social promotion, sometimes accompanied by programs to help less achieving students to catch up with their group age (the so-called "acceleration classes"). By the end of the decade, the government was able to announce that, for the first time, practically every child in Brazil had a place and was enrolled in fundamental education.

Achievements in higher education were less significant, except for the renewed growth in student enrollment, after the stagnation of the 1980s. The Brazilian Federal

<sup>&</sup>lt;sup>36</sup> See, for official overview, Secretaria de Educação Fundamental (2002)

<sup>&</sup>lt;sup>37</sup> There is no evidence that parents would not send the children to schools if they are available and receptive, and in this sense, the "bolsa-escola" program is probably not very effective. In any case, it can be justified as a way of transferring some money to poor families with children. For an overview and evaluation of one such a program in the city of Recife, see Lavinas, Barbosa and Tourinho (2001).

government is now responsible for an expensive network of 39 universities and 18 other higher education institutions, which enroll about 20% of the student population. There are also public universities owned by state governments, bringing total public enrollment to about 35% of the students. The high costs of the public institutions are caused mostly by the salaries and retirement benefits of their academic and administrative staff, all civil servants endowed with job stability and early, full-paid retirement; and by the maintenance of their teaching hospitals, which fill in, in practice, for the absence of adequate public hospitals in many places.<sup>38</sup>

This picture would not be complete without reference to the achievements in graduate education and the existence of many good quality professional schools, particularly in some of the leading Federal and State universities. Graduate education developed in earnest in Brazil after the adoption of the American model in the 1960s, and the establishment of independent sources of support and quality control for research and graduate education in the ensuing years. In 2001, there were about 60,000 students in MA and 32,000 in doctoral programs; about 10,000 students get their graduate degrees every year. Even discounting for some level of degree inflation, due to requisites for promotion in public universities, it is an impressive achievement, with no parallel in other countries in the region. The persistence and improvement of good quality professional education in many institutions can be explained by the early policy of not opening the public universities to unlimited admissions, as it happened in countries like Argentina, Uruguay or México.

Good results that do exist in basic and secondary education are more difficult to describe, because of the sheer size and complexity of these sectors. There is a strong and expected correlation between good schools and the availability of resources, and between the socioeconomic conditions of the students and their scholastic achievements. The best segments of public education are likely to be found in the Southern states of São Paulo, Paraná, Santa Catarina and Rio Grande do Sul, which combine reasonable levels of socioeconomic development with good administrative and pedagogic traditions. At the other extreme, the worst segment of Brazilian basic education is probably composed by the one hundred thousand or more rural schools, maintained by local municipalities, and enrolling about 5.5 million students, out of 35

<sup>&</sup>lt;sup>38</sup> Costs are also increased by the absence of criteria or incentives to reduce the expenditures per student and the student/teaching ration in the universities, which can vary by a factor of five or more, from one institution to another. Because of this, and the uniform, nation-wide careers and salary scales, the costs for the government are high, but salaries paid to the best qualified staff is well below the expectations, generating frustration and dissatisfaction on both sides.

million in basic education. These are usually one-class schools and one-teacher schools, with very little resources of any kind<sup>39</sup>.

These healthy segments of Brazilian education do not contradict the fact that the system as a whole is under severe strain, financially and institutionally, and needs to change and adjust, for more quality, efficiency and relevance. The good news is that, for these reforms, the amount of resources already committed to education is substantial; we know much more about education than we did in the past; society is more concerned with education than it has been until recently; and there are important segments of the academic and teaching professions that can participate and eventually lead.

# **Future policies**

From the vast array of problems and issues that can be raised, some have gained more notoriety in recent years, which does not mean, necessarily, that they address the fundamental questions. We can conclude by discussing some of them.

One recurring issue is resources. According to the experience of qualified state administrators, it is impossible to provide good, quality education in Brazil for less than one thousand reais per student per year – the equivalent of about 300 US dollars in early 2003.<sup>40</sup> In contrast, the latest floor established by Brazilian government for expenditures in basic education, through the use of the national education fund (FUNDEF) was R\$ 446.00 for students for the first four years of fundamental education, and R\$ 468,3 for the other four. (O Estado de São Paulo 2003)

Brazil spends already about 5% of its GNP in education, which places it in the same level of Spain, Italy or Japan, and above Chile or Argentina. However, this expenditure is strongly biased towards higher education. The estimation, done by INEP for 1996, was that the cost of a higher education student was 12.8 times more than of one in basic education, and 9.9 times more than one in secondary education. To change this situation without reducing the expenditures for higher education would require a substantial increase in public spending, bringing it to the 7% level, similar to countries like Canada or the United States. This could be a worthy goal, but not likely to take place in the near future, given, among other factors, the country's budgetary

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<sup>&</sup>lt;sup>39</sup> Data from the 2002 school census. In the last several years, these schools have been receiving substantial support from a World Bank supported project, Fundo Escola, whose outcomes are still unclear.

<sup>&</sup>lt;sup>40</sup> Alcyone Saliba, former state secretary of education of the state of Paraná, personal communication.

<sup>41</sup> http://www.inep.gov.br/imprensa/noticias/outras/news00\_20.htm.

squeeze and the still unresolved insolvency of the pension system. In the meantime, it is necessary to put the existing resources to better use, by adjusting the system's size to the actual need, and introducing better managerial and accounting practices.

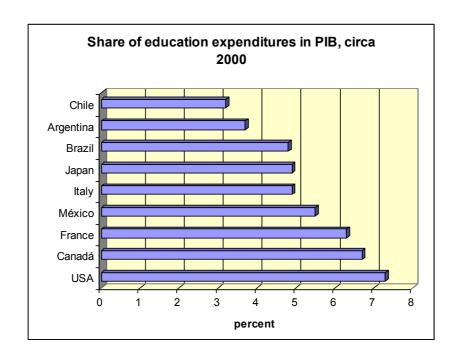


Figure 10 - Share of Education Expenditures in GDP, selected countries<sup>42</sup>

The other important resource is commitment. No significant improvement in education can occur at any level without the active participation and empowerment of the academic and teaching professions. Education is something that takes place in the daily interaction between teacher and student or not at all, notwithstanding the recent advancements in computer education, distance education, and the like. A recent survey of education experts in Latin America showed that, thinking about the future, they are not optimistic about the chances for getting more resources for education, but expect the situation to improve through the growing commitment to education of local communities and social organizations. (Schwartzman 2001)

Three conditions seem necessary for this commitment to take place. The first is that teachers and academics should be properly paid, and work with proper resources,

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<sup>&</sup>lt;sup>42</sup> Sources: For Brazil, Argentina and Chile, INEP, "Gastos do Brasil são mal distribuídos entre os diferentes níveis de ensino"; <a href="http://www.inep.gov.br/imprensa/noticias/outras/news00\_20.htm">http://www.inep.gov.br/imprensa/noticias/outras/news00\_20.htm</a> . For the other countries, Gouvernement du Québec, Government of Canada, Institut de la statistique du Québec, Organisation for Economic Co-operation and Development, Population Reference Bureau, Statistics Canada, US FedStats. <a href="http://www.stat.gouv.qc.ca/donstat/econm\_finnc/conjn\_econm/compr\_inter/educpib\_an.htm">http://www.stat.gouv.qc.ca/donstat/econm\_finnc/conjn\_econm/compr\_inter/educpib\_an.htm</a>.

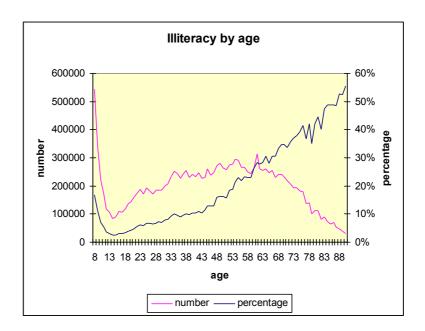
within an adequate system of incentives and rewards. The second is that they perceive that governments and education authorities are working in their favor, not against them. The third is that they are competent and committed to their academic and educational tasks. The first two conditions are closely linked, and Brazil has been particularly unsuccessful on both accounts. Salaries have not kept up with expectations, and there are few or no reward systems for achievement either in basic or in public higher education<sup>43</sup>. Until the recent presidential election of 2002, the relationships between the federal government and teacher's unions at all levels have been hostile. This may change now, but it is not likely that there will be resources, at the national or state levels, for salary increases.

The third condition may be the most difficult of all. Without strong professional commitments, there is a tendency for political and union issues to take precedence over scientific, pedagogic and academic concerns, leading education authorities to try increase control and supervision, and to limit the participation of teachers and academics in the management of their institutions - which generates further conflicts and alienation. The solution does not seem to be simply to transfer power to the education unions, or to give up on need to engage teachers and academics with their work. The problem is not peculiar to Brazil, but this does make it less relevant.

Another strategy is to create emergency programs to deal with extreme forms of illiteracy and bad quality education, bypassing and not waiting for the complex problems of formal education to be worked out. According to the latest household survey (PNAD 2001), 11.4% of Brazilians of ten years of age and more declared not to be able to read and write. To end adult literacy is a worthy goal, but not very easy to achieve, and probably not the first priority. Most illiterates in Brazil are older persons living in the poorest regions, and not many of them are likely to learn from literacy campaigns and incorporate reading and writing habits in their daily lives. The other large segment of illiterates is made up of children that do not learn when they first get to school, but do so after a couple of years. At age 14, illiteracy in Brazil is limited to 2.5% of the cohort, and it will fall naturally as the old generations wane.

<sup>&</sup>lt;sup>43</sup> Contrary to common belief, salaries for teachers in state administration, and for professors and academics in higher education, are not below the average income of persons with similar levels of education. Expectations, however, are more important than sheer numbers.

Figure 11 – Illiteracy, by age<sup>44</sup>



There are many initiatives in the private sector, non-governmental organizations and voluntary groups, to deal with the problems of low quality education, some of them very successful<sup>45</sup>. The main difficulty is to transfer the experiences of small-scale initiatives to the regular school system.

## Conclusion

As stated at the outset, the key problems for basic education in Brazil are to improve the quality of public education for the children who are already in schools and the provision of remedial education to adolescents and young adults who have dropped out or lag behind. Secondary education, which has expanded enormously in recent years, is by most accounts a disaster area. Half the students in secondary education attend evening classes, many of them work and are older than they should, and the contents of their courses tend to be irrelevant and provided by ill-prepared and unmotivated teachers. For most, the only goal is to get the education credential necessary for the job market or for some kind of higher education opportunity. Only the private sector has retained some quality, but, even there, rote learning to get into the most prestigious university careers is widespread.

<sup>&</sup>lt;sup>44</sup> Data from the National Household Survey (PNAD), 2001.

<sup>&</sup>lt;sup>45</sup> Among them the Fundação Abrinq pelos Direitos da Criança, the Fundação Ayrton Senna and the Fundação Bradesco.

Basic and secondary education are not in the hands of the Federal government, and even the best policies to improve the country's schools will take years to materialize. These policies should include an intensive work of preparing teachers to deal with illiteracy; to make the schools more responsive to quality and results, through institutional and administrative reforms; to implement assessment and standards; to add more resources, whenever possible; and to make sure that the resources that exist are put to the best possible use. Some hard choices will have to be made, concentrating resources in some sectors more than others – more, for instance, on fundamental education than in preschool or at the secondary level - and asking the community to get more involved and to help foot the bill.

On higher education, the private sector is already responsible for two thirds of the enrollment, and it would be impossible to reverse this situation in the foreseeable future. Brazilian higher education should expand much more than the current level of less than 10% participation of the relevant age group, and this can only be done through continuous diversification, pluralism, deregulation and the creation of mechanisms to curtail credentialism and stimulate quality and pertinence 46. There are serious problems of equity in higher education, created by the selectiveness of the most prestigious public institutions, and the free tuition and other benefits given to the chosen ones. The easiest, but wrong, policy in this regard would be to make the institutions more open by lowering quality and standards, or establishing quotas for underrepresented segments. The best policy would be to maintain and increase the standards whenever possible, to open different paths and opportunities for students coming from different backgrounds and conditions, and, again, to ask those who will benefit from education to help paying for it. The most equitable policy of all, however, would be to provide good quality basic education opportunities to everybody.

It is not an easy agenda, but neither is it an impossible one. Brazil's educational picture is still not a good one, in spite of some bright spots; the movie, however, shows a sense of direction and progress, which is far from uniform, and fraught with traps and false leads. But, at least, it is a movement in the right direction.

Oxford, Hillary term, 2003.

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<sup>&</sup>lt;sup>46</sup> It could be argued that credentialism is not an issue any longer, since a large proportion of students go today to general fields like administration, and later to jobs that do not require a specific diploma. However, the premium paid by a higher education degree in Brazil in the job market is still very high, suggesting that the diplomas still have an important value (I am grateful to Cláudio de Moura Castro for raising this issue).

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