



# The challenge of quality education for all Education in Brazil 1990-2000

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Ministério  
da Educação

# The challenge of quality education for all

## Education in Brazil – 1990-2000

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# Presentation

The Federal Constitution of 1988 became a landmark in setting the conditions toward education for all in Brazil. The Magna Carta, besides securing compulsory elementary education for a period of eight years, determines that secondary education should progressively be available to all the students, and makes early childhood education a right to the family and a duty to the State. The effect of these rights, ensured by the Federal Constitution, determined a marked expansion in enrollments in public education institutions, which, from 1988 to 2002, grew 58% for the pre-school, 36,5% for the elementary school, 232% for the secondary school, and 82% for tertiary schools, alongside with a total of about 720 thousand students enrolled in public nursery schools, which were not even accounted for in 1988, since nursery schools were not part of the educational sector.

There has been great improvement in supplying education services for all levels of education, however, there still remains a long way to go, both toward universal access to early childhood, secondary and tertiary education and to a qualitative improvement of the services provided by the school system. Here, as we will see later, the great challenge is broadening the basis of the resources available for financing education, since these resources available are not enough to secure good education to the

students enrolled in the public education system, in order to attain goals set by the National Plan of Education, sanctioned in 2001 for a 10 years period.

This document was prepared to evaluate the progress of education in Brazil as an input for the Brazilian participation in the 5th Ministerial Assembly to review the Education for All Program, to be held in the city of Cairo, Egypt, between the 19<sup>th</sup> and the 21<sup>st</sup> of December, 2003.

It presents an overview of the state of art of education in the country, pointing out at the main challenges for the government in order to be able to comply with the goal set by the Federal Constitution, that is, provide quality education for all Brazilians, regardless race-ethnicity, gender, religious or income.<sup>1</sup>

The report starts with the issue of illiteracy in Brazil, showing that this is a problem inherent to the texture of which is part of the very tissue of the Brazilian society, reflecting the deep inequalities prevailing in Brazil.<sup>2</sup>

The second part deals with the access to and the participation of the Brazilian population in the educational system. Here the more noticeable advances in national education can be verified. It is stated that, even though these advances have been noticeable, they are not enough to reach the level of educational development compatible with its potentialities.

Afterwards, questions about the Brazilian educational process are addressed, in which the need to improve the efficiency and the quality of the education system is needed so that the permanence and the progression of students can be ensured. Despite improvement in participation, results are still shortcomings due to high repetition rates, age-grade gap, besides poor school infrastructure, etc.

Therefore, it is easy to notice why the Brazilian students present such low results. The results of the National System of Evaluation for Primary Education<sup>3</sup> show that the majority of students in Brazil perform below minimum standards requirements, endorsed by the weak performance of Brazilian students in international comparative studies.<sup>4</sup>

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<sup>1</sup> For a wider view of the Brazilian educational system, please refer to the publications from Inep: *Educação do Brasil na Década de 90* (Education in Brazil in the 90's) and *Geografia da Educação Brasileira* (Geography of the Brazilian Education).

<sup>2</sup> Inep tackles the topic in a deeper way in its publication *Mapa do Analfabetismo no Brasil* (Map of Illiteracy in Brazil).

<sup>3</sup> For further information about the Saeb (National System of Evaluation of Primary Education), please refer to *Quality of Education: a new reading of the performance of the students of the 4<sup>th</sup> year of elementary school*.

<sup>4</sup> For further information about the the Brazilian participation at Pisa, refer to the Inep publication: *Pisa: International Report*.

General aspects referring to public financing of education in the country are also presented, pointing out at the amount spent in education and the major challenges to the sector.

Finally, the main goals established by the National Educational Plan are presented, as well as the goals from the Ministry of Education (MEC), presented in the Pluriannual Plan (PAP). This confirms the Brazilian commitment to overcome the inefficiency of the public education system making education stronger and bringing about changes for a better education longed by the Brazilian society.



# 1. Illiteracy

Even though we observe a marked improvement over the last 10 years in the illiteracy rates, we have to be critical over the educational challenges the country still needs to tackle to overcome the historical deficit.

Eliminating illiteracy is, obviously, the first step towards the establishment of an educational system, which is both integrative and inductive to social and economical development. The results of the Human Development Index (HDI) showed that Brazil, despite improvements in its international position, managing to reach, in the year 2000, ranking 73<sup>rd</sup>, still shows one of the highest illiteracy rates, 13.6% of its population aged 15 years and above, which represents, in a significant number of 16,3 million people. This situation becomes more uncomfortable when compared to countries with lower HDI.

Table 1 – Human Development Index and Illiteracy Rate for the population 15-years-old and above – 2000

Country	HDI		Illiteracy Rate (%)
	Index	Position	
Norway	0,942	1 <sup>o</sup>	0,0
Australia	0,939	5 <sup>o</sup>	0,0
Austria	0,926	15 <sup>o</sup>	0,0
Spain	0,913	21 <sup>o</sup>	0,0
Portugal	0,880	28 <sup>o</sup>	7,8
Argentina	0,844	34 <sup>o</sup>	3,2
Chile	0,831	38 <sup>o</sup>	4,2
Costa Rica	0,820	43 <sup>o</sup>	4,4
Trinidad and Tobago	0,805	50 <sup>o</sup>	1,7
Mexico	0,796	54 <sup>o</sup>	8,8
Colombia	0,772	68 <sup>o</sup>	8,4
Brazil	0,757	73 <sup>o</sup>	13,6
Peru	0,747	82 <sup>o</sup>	10,1
Ecuador	0,732	93 <sup>o</sup>	8,4
Cabo Verde	0,715	100 <sup>o</sup>	26,2

Source: Pnud and Unesco.

It must be mentioned, however, that there has been a decrease of these indices and that in the 90's the illiteracy rate registered an average annual decrease of 4.2% and a positive tendency towards the decrease of

Table 2 – Total Population and Illiterates for 15 years-old and above – Brazil – 1991-2000

Year	Total	Illiterates	Illiteracy Rate (%)
1991	95.837	19.233	20,1
2000	119.533	16.295	13,6

Source: IBGE – Demographic Census 1991 to 2000.

the absolute number of illiterates aged 15 years and above, something that had not happened since 1920.

The Brazilian educational system clearly shows a significant reduction of illiteracy in the young adult population, reaching indices smaller than two digits for the population aged 29 year old or less. On the other hand, for the population aged 50 years and above, a group more difficult to be reached by government programs aiming at fighting illiteracy, the rate is at the level of 29.4%.

Gender differences in illiteracy rates are not relevant in Brazil. Despite being equally worrisome, illiteracy rates diverge in only 0.3% in favor of the women.

On the other hand, the country shows a strong regional bias, reflecting and reproducing the socio-economical inequalities of its population. For instance, the illiteracy rate of the population in rural areas is three times the one registered in urban areas, a relation that has not change much since the beginning of the 90's.

Table 3 – Illiteracy Rate for the Population of 15 years-old and above – Brazil – 1991-2000

Variable	Year	
	1991	2000
<b>Age group</b>		
15 years old and above	20,1	13,6
15 to 19 years	12,1	5,0
20 to 24 years	12,2	6,7
25 to 29 years	12,7	8,0
30 to 39 years	15,3	10,2
40 to 49 years	23,8	13,9
50 years and above	38,3	29,4
<b>Gender</b>		
Man	19,8	13,8
Woman	20,3	13,5
<b>Location</b>		
Urban	14,2	10,2
Rural	40,5	29,8

Source: IBGE – Demographic Census 1991-2000.

The portrait of inequalities can also be noticed if we analyze the phenomenon by race/ethnicity. In spite of the mixed race/ethnicity characteristics of the Brazilian population, the illiteracy rate among the Afro-Brazilian population is almost twice the one among the white ones, and this ratio is closely related to the socio-economical levels of these populations.

Table 4 – Illiteracy Rate for the population 15-year-older and above, by Race/Ethnicity – Brazil – 1992-2001

Race/Ethnicity	Year	
	1992	2001
White	10,6	8,3
Black	28,68	21,0
Mixed Background	25,23	19,6

Source: IBGE – PNAD 1992 and 2001.  
NB: Excluding the rural population of Rondônia, Acre, Roraima, Pará and Amapá.

In a world order where schooling is part of the basic tools for acquiring citizenship and access to the labor market, it is clear that the higher levels of illiteracy happen among the people from the lowest income groups. While the illiteracy rate among the richer population is only 1.4%, among the poorest ones it is 28%.

Table 5 – Illiteracy Rate for the population 15-years-old and above – Brazil – 1996-2001

Income group	Year	
	1996	2001
Up to 1 minimum wage	34,9	28,8
More than 1 minimum wage and 3	26,6	19,7
More than 3 and 5 minimum wages	14,8	9,7
More than 5 and 10 minimum wages	7,4	4,7
More than 10 minimum wages	2,4	1,4

Source: IBGE – PNAD 1996 and 2001.  
NB: Excluding the rural populations of Rondônia, Acre, Roraima, Pará and Amapá.

## 2. Access and participation

Over the last years, Brazil has made a great effort to include more children in the educational system. The results can be observed by the participation rates at school and the growing number of enrollment at all levels of education. Access to school is the first step towards eliminating illiteracy. If, on the one hand, access to education, mostly for the 7 to 14 years population, has reached satisfactory levels, comparable to the ones of developed countries, on the other, it is essential that these children remain in school. It is not only participation for this age group that has grown significantly, it also happened among the group of those between 15 and 17, 81.1% of them were enrolled in school during 2001.

Table 6 – Rate of School Attendance – Brazil – 1996-2001

Age group	Participation rates by age group				
	0 to 3 years	4 to 6 years	7 to 14 years	15 to 17 years	18 to 24 years
1996	...	55,4	90,2	66,8	25,8
2001	10,6	65,6	96,5	81,1	34,0

Source: IBGE – Population Census 1996 and Pnad – 2001.

NB: In 2001: excluding the rural population of Rondônia, Acre, Roraima, Pará and Amapá.

However, for early childhood education, Brazil need improvement, so that it may guarantee that all of them who want to, have access to education, as it is ensured by the legislation. This is a tenet established by the Federal Constitution and by the Law for Guidelines and Basis of the National Education and will demand cooperation and coordination among the three levels of government.

Secondary education is the level of education that has mostly grown in the last ten years, a reflection of the improvement of the students flow; in other words, more students are completing Elementary Education. While the number of students in the first cycle (1st to 4th grades) of this level has grown only 4.3% in one decade, at the second cycle (5th to 8th grades) level, enrollment growth was 57.9%. The result is a strong demand for secondary education.

In the same way, the tertiary education system has grown very markedly over the last years, especially the private sector. At present, this sector corresponds to about 70% of the total of enrollments of higher education. However, the participation rate in tertiary education in the country is still one of the lowest in Latin America (12% of the population between 18 and 24). As the supply conditions of the private sector has reached its limits, with a large number of vacancies unattended, the way out must be through the growth of the public sector, which is the one presenting the best quality of education provided.

The offer of special education has progressively improved in Brazil. Today there are more than 300 thousand students being served. It is the private sector, however, through philanthropic institutions, which get the biggest share: 56.1% of the students of especial education study in these schools.

Including special education students in the regular classroom has become part of the daily life in many schools in Brazil, and nowadays there are more than 30 thousand students attending regular classroom.

Table 7 – Enrollments by Level/Mode of Education – Brazil – 1991-2000

Level/Mode of Education	1991	2000	Growth (%)
Early childhood education	3.628.285	5.338.196	47,1
Nursery school	...	916.864	...
Pre-school	3.628.285	4.421.332	21,9
Literacy classes	1.655.609	674.044	-59,3
Elementary education	29.203.724	35.717.948	22,3
1 <sup>st</sup> to 4 <sup>th</sup> grade	19.383.721	20.211.506	4,3
5 <sup>th</sup> to 8 <sup>th</sup> grade	9.820.003	15.506.442	57,9
Secondary education	3.772.698	8.192.948	117,2
Special education	...	300.520	...
Adult education	...	3.410.830	...
Tertiary education	1.565.056	2.694.245	72,2

Source: MEC/Inep.

NB: Enrollments in Special Education refer to the number of students bearing special needs and who get specialized attention either in schools exclusively specialized or in regular classes.

In 2000, 9 Institutions did not answer to the Tertiary Education Census.

In 1991, enrollment for 1<sup>st</sup> to 4<sup>th</sup> years includes multi-grade classes.



### 3. Supply of quality education

Another major challenge to the Brazilian Educational System is posed by the need of improving the profile of teachers' qualification, essential to the teaching-learning process. With more than 2,5 million teachers working in basic and tertiary education, the country still does not count on enough qualified teachers with tertiary education degree working in basic education, currently, the functions occupied by professional teachers who do not have tertiary education qualification. The effort to revert this picture is part of the governmental policy of enhancement of the teaching career, by increasing their salaries and policies directed to improve the professional status of teachers.<sup>5</sup>

Over the last decade, at all levels and mode of education, the percentage of teachers having higher education qualification has been growing, but is still insufficient for solving the problem in a short time. In elementary level, less than 50% of the teaching positions are held by professionals with tertiary education.

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<sup>5</sup> In the publication *Estatísticas dos Professores no Brasil* (Statistics for Teachers in Brazil), Inep approaches in depth the major indications for the performance of teachers in all levels and kinds of teaching.

Table 8 – Percentage of the Teachers with Tertiary Education by Level – Brazil – 1991-2000

Level/Mode of Education	Year		
	1991	1996	2000
Pre-school	17,1	18,2	23,1
Elementary education	41,0	43,8	48,3
Secondary education	83,5	86,4	88,5
Special education	...	43,4	46,4
Adult education	...	61,1	67,5

Source: MEC/Inep.  
NB: The same teacher can teach in more than one level/mode of education, in one or more schools.

In terms of tertiary education, the policy is aimed at the acquisition of master and doctorate degrees. In 1991, only 35% of the teachers working in higher education had advanced degrees while in 2000 they represented 52% of all higher education teachers.

In order to fulfill the needs of the educational system we need adequate qualification of the teaching staff as well as, investment in the schools infrastructure.

Table 9 – Tertiary Education – Percentage of Professors by Qualification – Brazil – 1991-2000

Qualification	Year	
	1991 <sup>(1)</sup>	2000 <sup>(2)</sup>
<b>Brazil</b>	<b>100,0</b>	<b>100,0</b>
Without tertiary education	0,1	0,1
Tertiary education	31,8	15,8
Specialization	32,9	32,1
Masters degree	21,8	31,4
Doctoral degree	13,3	20,6

Source: MEC/Inep.  
NB: The same teacher can teach in more than one institution.  
(1) – Only teachers involved in teaching.  
(2) – Total number of teachers.

Elementary education covers 63% of all students in the Brazilian education system. However, despite the improvement in the infrastructure, 6% of the students still attend schools without electricity; 4% without a sewage system and 1% without drinking water supply.<sup>6</sup>

Table 10 – Elementary Education – Enrollments and Percentage of Students Attending Schools With Drinking Water, Electricity, Sports Court and Principal’s Office – Brazil – 1997-2001

Year	Initial Enrolment at the Regular Elementary Education										
	Total	Drinking Water		Electricity		Sports Court		Sewage System		Secretary or Principal Office	
		Absolute	%	Absolute	%	Absolute	%	Absolute	%	Absolute	%
1997	34.229.388	33.151.949	96,9	31.661.283	92,5	17.458.887	51,0	32.277.652	94,3	30.262.831	88,4
2000	35.717.948	35.241.576	98,7	33.727.855	94,4	18.204.873	51,0	34.434.883	96,4	32.003.786	89,6

Source: MEC/Inep.

In terms of the pedagogical resources, schools still lag behind on adequate conditions. Only 58% of the students of elementary school attend schools having libraries, 21% have access to science laboratories, 22% have access to computer laboratories. TV School, a governmental policy offering a TV channel to teachers and students, is available to 54% of the students of elementary education.

Table 11 – Elementary Education – Enrollments and Percentage of Students Attending Schools With Libraries, Science Laboratories, Computing Laboratories, Internet and TV Schools – 1997-2001

Year	Initial Enrollment at the Elementary Education										
	Total	Library		Science Laboratory		Computer Laboratory		Internet		TV School	
		Absolute	%	Absolute	%	Absolute	%	Absolute	%	Absolute	%
<b>Brazil</b>											
1997	34.229.388	19.475.328	56,9	8.266.411	24,2	3.686.552	10,8	-	-	19.628.976	57,3
2000	35.717.948	20.862.982	58,4	7.342.142	20,6	7.973.748	22,3	6.704.784	18,8	19.355.006	54,2

Source: MEC/Inep.

<sup>6</sup> Caracterização Física das Escolas (Physical Characterization of the Schools), an Inep publication, depicts the main indicator of the School Census about the infrastructure available in the schools for primary education in Brazil.



## 4. Permanence and progression indicators

After a first reading, the indicators presented related to supply of education cause a good impression about the Brazilian educational system. The contents of this topic, however, shows we need to be very careful before reaching out a conclusion about it, since Brazilian education still proves itself to be very inefficient both concerning to the number of graduates and the quality of learning.

Repetition, which interrupts the natural school flow for the student, has been indicated in studies and research as a major impediment to the educational development and a cause of breakage in the students' self-esteem. Although a reduction in these numbers has been verified, in 2000 about one fifth of the students (21.7%) in the elementary school were enrolled in the same school grade as in the previous year.

Table 12 – Transition Rates for the Students Flow by Level of Education – Brazil – 1991-2000

Level of Education/Transition Rate	1991	2000
<b>Elementary Education</b>		
Promotion	60,4	73,4
Repetition	33,2	21,7
Drop-out	6,4	4,9
<b>Secondary Education</b>		
Promotion	63,1	73,4
Repetition	30,7	18,6
Drop-out	6,2	8,0

Source: MEC/Inep.

NB: The rates for 1991 were estimated by Ruben Klein – LNCC/CNPq.

Table 13 – Age-grade gap Indicator and Percentage of Students of Elementary Education in the 1<sup>st</sup> Cycle of Elementary School (1<sup>st</sup> to the 4<sup>th</sup> Grade) – Brazil – 1991-2000

Markers	1991	2000
<b>Rates of distortion between age-grades</b>		
Elementary school	64,1	41,7
Secondary school	72,4	54,9
<b>% of students of elementary school from 1<sup>st</sup> to 4<sup>th</sup> grade</b>	65,1	56,6

Source: MEC/Inep.

As a consequence of the high repetition rates, the age-grade gap is one of the major problems in Brazilian education.<sup>7</sup> In 2000, for each 100 of students enrolled in elementary school, 42 were not enrolled in their own age cohort class grade. For the secondary level, this indicator was 54.9%. The assessment shows that the students lagging behind at school (that is, attending a grade which does not correspond to their age cohort group) have lower performance in relation to the students in grades appropriate to their age cohort group.

<sup>7</sup> For further details on the subject, refer to the publication Sincronismo idade-série: um indicador de produtividade do sistema educacional brasileiro (Synchronism age-grade: an indicator of productivity of the Brazilian Educational System).

Table 14 – Efficiency Education Indicators by Level of Education – Brazil – 1991-2000

Level of Education/Indicator	1991	2000
<b>Elementary Education</b>		
Expected number of years in school	9,0	8,5
Expected number of grades concluded	6,0	6,6
Expected number of years for graduating	11,9	10,2
Expected number of graduates (%)	42,6	59,3
<b>Secondary Education</b>		
Expected number of years in school	3,8	3,7
Expected number of grades concluded	2,7	2,6
Expected number of years for graduating	4,2	3,7
Expected number of graduates (%)	76,9	74,0

Source: MEC/Inep.

Even though at a low pace, it is possible to see a significant reduction in the age-grade gap rates at each grade of basic education. It is also important to notice that this indicator has a strong inertial component, a factor helping to explain this slow pace.

The improvement of the students flow has had a strong impact on the age-grade gap indicator. In 1991, for the elementary level, 65.1% of the students were enrolled between the 1st and the 4th grades; in 2000, however, this was reduced to 56.6%.

One of the consequences of the smaller number of repeaters reflects itself in the growth on the number of students reaching higher grades of the elementary school. The decrease in the total of enrollment in elementary school and, at the same time, the growth in the numbers of students who finish this school level and enroll in the secondary school is also a consequence of a more efficiency system. Its consequence has been the improvement of the students flow, and the decrease in the dropout rates.

Brazilian students are spending more years at school, as well as improving their schooling. However, these numbers are still high, on average a student takes 8.5 years to finish 6.6 grades, due to the high repetition rates.

If there were no repetition student would finish elementary school in eight years, and secondary school in three. The long a permanence does not translate in an equal number of grades fulfilled. This

leads to financial and pedagogical wastage, which should be redirected to the improvement of other aspects of the educational system. This shows that the quality of education (or lack of it) has a direct impact on the number of years needed for a student to complete his studies. Today in Brazilian Elementary Education there are about 8 million extra students, who do not belong to the official 7 to 14 population.

It is estimated that for each group of 100 students who enroll in the first year of the elementary school in 2000, 59 will manage to finish this school level of education. And they will take, on average, 10.2 years to finish eight grades.

To those who have succeeded in reaching secondary education, the expectancy for completing this level of education is higher. For every 100 students who have enrolled at the first grade of this level in 2000, it is estimated that 74 will manage to be able to finish it, taking on average 3.7 years to complete 3 grades.

So, what we can conclude is that the country has, undoubtedly, a marked progress as to drop out and progression indicators: However, there is still a long way to go to ensure the completion of elementary school to all the ones who have enrolled in it and a still longer road to go in order to provide universal secondary education.

## 5. Students' assessment results

The results of proficiency from the 2001 SAEB assessment (System of Evaluation of the Basic Education), have served as a basis for the development of five categories of performance: very insufficient, insufficient, intermediate, satisfactory and advanced (see notes on Tables 15 and 16).

The analysis of the data from the 4<sup>th</sup> grade students in Portuguese (language) shows 22.2% of the students as having a very insufficient performance. In other words, they are at the negative end of the scale of proficiency devised by Saeb, and it means that these students have not developed basic reading skills. Thus they have not been properly taught how to read and write. Under a severe scrutiny, we can say that almost 59% of the Brazilian 4<sup>th</sup> grade students have serious deficiencies towards reading, and are classified as being at the very insufficient or insufficient stages. Only 5% of the students show the expected performance for the grade being tested.

Table 15 – Percentage of Students by Proficiency Level – Portuguese 4<sup>th</sup> Grade – Elementary Education – 2001

	Proficiency Level				
	Very insufficient	Insufficient	Intermediate	Satisfactory	Advanced
Brazil	22,2	36,8	36,2	4,4	0,4

Source: MEC/Dæeb.

**NB: Very insufficient:** Students did not develop reading skills. They are considered functionally illiterates. They were not able to answer the test items. At this stage they were not able to reach level 1 of the Saeb scale.

**Insufficient:** Students are not skilled readers, they are able to read only simple sentences. At this stage, they are placed at levels 1 and 2 of the Saeb scale.

**Intermediate:** Students are starting to develop reading skills, but still below the requirement for reading skills for this grade level. Students at this stage are placed at levels 3 and 4 of the Saeb scale.

**Satisfactory:** Students developed adequate basic reading skills for the 4<sup>th</sup> grade. At this stage, they are placed at level 5 at the Saeb scale.

**Advanced:** Students developed comprehensive reading skills for this grade level. At this stage they are placed at level 6.

As to Mathematics, the situation is not much different. More than 52% of the students have shown a performance considered insufficient or very insufficient. On the other hand, fewer than 7% of the students have shown a performance considered adequate to the 4<sup>th</sup> grade.

Table 16 – Percentage of Students by Proficiency Level – Mathematics 4<sup>th</sup> Grade of Regular Elementary Education – 2001

	Proficiency Level				
	Very insufficient	Insufficient	Intermediate	Satisfactory	Advanced
Brazil	12,5	39,8	40,9	6,8	0,01

Source: MEC/DAEB

**NB: Very insufficient:** Students were not able to transpose, for a specific mathematical language, operational commands compatible with the 4<sup>th</sup> grade. (They cannot either identify a plus or minus, or do not know the geometric significance of simple figures). Students at this stage were not able to reach level 1 of the Saeb scale.

**Insufficient:** Students develop some elementary abilities to interpret problems below what is expected to the 4<sup>th</sup> grade. (They are able to identify a basic operation and name simple geometrical figures). At this level students reach levels 1 and 2 in the Saeb scale.

**Intermediate:** Students develop some abilities for interpretation of problems, but not what is expected for students of the 4<sup>th</sup> grade. (They identify, without precision, up to two operations and some geometrical elements involved in the problem). At this stage students reach levels 3 and 4 of the Saeb scale.

**Satisfactory:** Students are able to interpret and solve problems in a competent way. They present abilities compatible with the 4<sup>th</sup> grade. (They recognize and perform operations with rational numbers using sums, subtractions, multiplications and divisions, as well as elements and characteristics belonging to the plain geometrical figures). At this stage students reach levels 5 and 6 of the Saeb scale.

**Advanced:** They are skilled students. They present abilities for interpretation of problems in a level beyond what is expected for students of the 4<sup>th</sup> grade. (They are able to recognize, solve and how to transpose to new situations all the operations with rational numbers involved in a problem, as well as elements and characteristics of the plain geometrical figures). At this stage they reach level 7 of the Saeb scale.

## 6. Educational profile of the population

The educational system must have as its aim the fostering of higher levels of education for its population, making it able to perform in a critical and responsible way for the building of a fairer, more democratic and more developed society.

The average schooling of the Brazilian population has progressed from 4.9 years of schooling in 1992, to 6.1 in 2001. However, it is not equal to elementary schooling, that is of 8 years of studies.

The demands of the labor market has shown that those who have secured a job present a school level somewhat above the national average, that is, 6.7 years of studies. The women's average level of schooling has surpassed that of the men, reaching 6.2 in 2001. Among the employed women, the demands of schooling has made them reach the average of 7.3 years, surpassing men in one year of schooling.

Table 17 – Average Number of Years of Schooling for the Population Aged 10 years-old and above, Total and Employed, by Gender – Brazil – 1992-2001

Year	Average of years of schooling					
	Total			Employed		
	Total	Man	Woman	Total	Man	Woman
1992	4,9	4,8	4,9	5,3	5,1	5,7
1999	5,8	5,6	5,9	6,3	5,9	6,8
2001	6,1	5,9	6,2	6,7	6,3	7,3

Fonte: IBGE – PNAD 1992, 1999 and 2001.  
 NR: Excluding the rural population of Rondônia, Acre, Roraima, Pará and Amapá.

In Brazil, we observe deep racial inequalities. Race/ethnicity inequalities are shown in a perverse way. The average schooling of the white population reaches 7 years of studies while blacks and mixed background have on average 5 years of schooling.

Table 18 – Average Years of Schooling for the Population 10 years-old and above, by Race/Ethnicity – Brazil – 1992-2001

Year	Average years of schooling			
	Total	Race/Ethnicity		
		White	Black	Mixed
1992	4,9	5,8	3,4	3,7
1999	5,8	6,7	4,5	4,6
2001	6,1	7,0	5,0	5,0

Source: IBGE – PNAD 1992, 1999 and 2001.  
 NR: Excluding the rural population of Rondônia, Acre, Roraima, Pará and Amapá.

But the most discriminating factor related to schooling is associated to poverty, showing that low income families are almost out of formal education. When one associates the average income of the population to the race/ethnicity factor, this question is more sorely evident. Among the employed population, the average schooling among blacks and mixed background does not reach 6 years of schooling, with an average of monthly income around two times the minimum wage. It should be noticed that this is still a privileged group of a society under high unemployment. Among the employed white population, the average schooling is 8 years (equal to the compulsory schooling) and their monthly average income is 4.5 times the minimal wage. Another evidence shown in Table 19 is that, despite the increase in number of average schooling between 1999 and 2001, there was a decrease in income for all groups, which shows that more schooling does not necessarily imply in better incomes.

Table 19 – Average Years of Schooling and Income for the Employed Population, by Race/Ethnicity – Brazil – 1992-2001

Year	Employed population by Race/Ethnicity					
	White		Black		Mixed	
	Average years of schooling	Average income in minimum wages	Average years of schooling	Average income in minimum wages	Average years of schooling	Average income in minimum wages
1992	6,7	4,0	4,0	1,9	4,4	2,0
1999	7,6	5,3	5,2	2,4	5,2	2,5
2001	8,0	4,5	5,7	2,2	5,6	2,2

Source: IBGE – Prad 1992, 1999 and 2001.

NB: Excluding the rural population of the states of Rondônia, Acre, Roraima, Pará and Amapá.

According to the data above and while structural changes do not occur in the economy, it is important to emphasize the adoption of compensatory public policies as Bolsa-escola Program (stipends to low-income families that enables children to stay in school instead of the labor market and street) and School Meals Program, among others, which favor the permanence of the students in school.



## 7. Financing education

The 1988 Federal Constitution also consolidated the constitutional transfer of funds to education as a portion of the tax revenue. It establishes that a minimal of 18% of the net Federal revenue in taxes and of 25% of the one for the states and municipalities must be spent in the maintenance and development of education. This policy of entailment goes back to the Federal Constitution of 1934, excepting for the dictatorial periods (1937-1945 and 1967-1983). Despite the huge progress it represented in securing a stable source for financing education, its capacity for ensuring money to face new educational challenges presented below has been undermined. This is a result of the low economical growth of the recent years and of a tax policy that gradually diminished the participation of the taxes in the composition of the country revenue burden. As an example, while the income from taxes and contributions grew 187% from 1995 to 2002, the expenditure of the Ministry of Education – MEC grew only 84%. Table 20 shows a comparison among different countries.

Table 20 – Public Expenditure on Education – 1999

Public expenditure 1998/1999		Expenditure/Student	
Adjusted to R\$ by PPP	(%) of the GDP	Elementary	Superior
Australia	5,0	4.178	10.084
Japan	3,5	4.506	8.839
Mexico	4,4	943	4.119
South Korea	4,1	2.441	4.606
Portugal	5,7	2.991	4.130
United States	5,2	5.661	16.529
<b>OECD Average</b>	<b>5,2</b>	<b>3.637</b>	<b>9.823</b>
Argentina	4,5	1.401	4.821
Brazil	4,3	691	9.756
Chile	4,2	1.463	5.943
Paraguay	4,8	754	4.700

Source: *Education at a Glance 2002*, OECD. The data for the expenditure were adapted to Real by the parity index of power of purchase (PPP), here US\$ = 1,00 = R\$ 0,86, calculations from the World Bank.

The data show that, except for Japan, public expenditure in developed countries is around 5% and 6% of the GDP - Gross Domestic Product, while in developing countries they stay between 4% and 5% of the GDP.

Even though Brazilian expenditure on education in relation to the GDP is not different from the countries listed, in view of the low value of the Brazilian GDP per capita, the expenditure/student at elementary school is one of the smallest ones. As to tertiary education, the expenditure/student are higher because the public system of tertiary education, while using up to 21% of the total funds spent on education, accounts for a much smaller number of students than the one attending basic education. This guarantees a different quality and explains why the public universities concentrate the largest part of the scientific production and Master and Ph D courses in the country, or why the relation candidate/vacancy for the public tertiary education courses, in 1999, was of 8.3 against a ratio of 2.3 in the private sector.

An important change in the financing system of education in the country happened with the implementation of the Fund for the Maintenance and Development of Primary Education and Enhancement of the Teaching Career (Fundef), in 1998. According to it, at least 60% of the resources allocated to education should be spent in primary education. The implementation of this fund had an equalizing

effect on the States, once it managed to reduce the discrepancies which existed in the standard of service among the municipalities and state education systems. But this sub-entailment ended up causing lack of interest in investments in childhood and secondary education, sectors where there is a large demand not attended in the country. Finally, the implementation of this fund did not manage, in fact, neither to improve the salaries levels and teachers career paths nor to reduce the differences among regions in the Country. On Table 21 it can be seen that teachers, when compared to a large number of professions, are the ones earning the lowest salaries, or even that, in spite of Fundef, a teacher from the Northeast earns less than half the salary of the one from his colleague from the Southeast.

Table 21 – Average Monthly Income and Number of Professionals According to Type of Profession for Geographical Regions and Brazil – 2001

Type of Professionals	Number of professionals in Brazil	Average income by geographical regions <sup>(1)</sup>					
		Brazil	North	Northeast	Southeast	South	Center-West
Preprimary teacher	201.232	423	389	233	522	436	750
1 <sup>st</sup> to 4 <sup>th</sup> grades teacher	881.623	462	443	293	599	553	567
5 <sup>th</sup> to 8 <sup>th</sup> grades teacher	521.268	600	601	373	793	634	594
Education personnel other than teachers with Tertiary education	139.575	849	753	550	1.093	738	835
Secondary education teacher	348.831	866	826	628	979	804	872
Noncommissioned officer to the Armed Forces	517.038	869	818	724	986	747	911
Research professor	6.448	899	215	1.150	947	713	875
Public administrative personnel	316.761	912	661	679	1.072	926	1.103
Business manager	502.895	1.203	987	775	1.411	1.058	1.124
Public technician with tertiary education	421.318	1.311	1.054	794	1.587	1.308	1.877
Civil police	72.743	1.511	1.344	1.320	1.458	1.488	2.087
Military officer	89.387	2.092	2.129	1.674	2.251	1.950	2.321
Economist	44.772	2.255	1.701	2.009	2.227	1.641	3.593
Auditor	68.870	2.408	3.513	1.585	2.588	1.986	3.134
Lawyer	271.241	2.497	3.894	2.245	2.431	2.597	2.768
University professor	136.977	2.565	1.800	2.252	3.087	2.123	2.190
Police Sheriff - official appraiser	13.973	2.661	2.754	1.347	2.651	3.714	5.970
Doctor	257.414	2.973	4.430	2.577	2.802	3.260	4.111
Judge	10.036	8.321	5.905	8.039	9.018	9.750	7.331

Source: Nacional Research by Home Sampling (Pnad) – 2001.  
NB: (1) Values in R\$, September 2001.

It is expected that in order to comply with the Education National Plan would take up to 7% of GDP. If this happens it could guarantee the resources needed to provided a public education with quality.

## 8. Challenges for quality education for all

This diagnosis about the Brazilian education shows that, the federal, state and municipalities face a huge challenge in order to comply with the objectives and goals established by the National Education Plan (NEP) by the year 2011. To the NEP we added, the goals established in the Pluriannual Plan (PAP), in which the educational goals of the Ministry of Education are included. All these objectives and goals are listed below and demonstrate the dimension of the challenges Brazil faces over the next few years, and make it clear that without additional funding, there is little chance they will ever be reached.

### 8.1. Major goals of the National Education Plan (from 2001)

#### Early Childhood Education

- Ensuring enrollment to 30% of the children up to the age of 3 within 5 years;
- Ensuring enrollment to 50% of the children up to age of 3 within 10 years;
- Ensuring enrollment to 60% of the children aged 4 to 6 within 5 years;

- Ensuring enrollment to 80% of the children aged 4 to 5, and an enrollment of 100% at the age of 6 within 10 years;
- Providing schools having a minimal of adequate infrastructure within 5 years;
- Ensuring, at least, all the teachers of early childhood education with secondary education qualification provided by Teachers' Training Schools, within 5 years;
- Ensuring, at least, all the teachers of early childhood education with tertiary education qualification, within 10 years;
- Providing, in 100% of the municipalities, an structure for supervising Children's Education, within 3 years;
- Ensuring school meals for every child enrolled in the public early childhood education system;
- Expanding, progressively to a full-time period the education programs.

#### Elementary School

- Expand to a 9 years period the Elementary Education, starting from the age of 6;
- Providing schools with minimal adequate infrastructure, within 5 years;
- Ensuring the Program of Minimal Income for Low-income families (stipends to low-income families that enables children to stay in classrooms and playgrounds, and stay off the labor market and street);
- Provide education services in schools at most over 2 daytime periods and 1 night time period;
- Progressively expand the education in school to , at least, a 7-hour-day period;
- Promoting gradually the reduction of the night classes shift.

#### Secondary School

- Attend at least 50% the demand for secondary education within 5 years;
- Attend 100% the demand for secondary education within 10 years;
- Ensuring tertiary qualification for all the teachers, within 5 years;
- Ensuring schools with minimal of adequate infrastructure, within 5 years;
- Promote specific teachers qualification programs to attend the demand of teachers of secondary education, especially in the areas of Sciences and Mathematics.

### Tertiary Education

- Providing, up to the end of the decade, access to at least 30% of the 18 to 24 year old population.
- Promote the annual increase in the number of masters and doctors graduates in at least 5%.

### Adult Education

- Eliminating adult illiteracy within 10 years;
- Ensuring the offer of Adult Education for the 1<sup>st</sup> to the 4<sup>th</sup> grade of elementary school to 50% of the population aged 15 and above, within 5 years;
- Ensuring the offer of Adult Education the 5<sup>th</sup> to 8<sup>th</sup> grade of elementary school for 100% of the population aged 15 and above completing the 4<sup>th</sup> grade, within 10 years;
- Doubling the capacity to offer Adult Education for the secondary education level, within 5 years;
- Expand four times the capacity to offer Adult Education for the secondary education level, within 10 years;
- Implementing, in all prison units and in all the institutions treating troubled youth and law violators youngsters, programs of Adult Education for the Elementary and Secondary Levels, as well as qualifications aiming at the labor market.

### Special Education

- Ensuring enrollment to all the students with special needs in Elementary School, within 10 years;
- Ensuring adapted schools, with a minimal adequate infrastructure, within 5 years;
- Increasing funding destined to special education so that it may reach 5% of the resources entailed to education, within 10 years.

### 8.2. Ministry of Education Programs Established in the Pluriannual Plan 2004-2007

- Enhancement and qualification of the education personnel;
- Enhancement and qualification of teachers;
- University of the 21<sup>st</sup> Century;

- Democratic Management for the Education Systems;
- Sustainability for the education: modern management and increased financing;
- The ideal basic school (enhancement of the implementation of the major education policies in selected municipalities throughout the country);
- A school open to the public promoting citizenship;
- Education in Infancy;
- Modern school (renovation and pedagogical equipment for all levels of education);
- Democratizing the access to the tertiary and to professional qualification;
- A literate Brazil;
- An educated Brazil.

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\*All the publications mentioned in this work can be obtained at this address: [www.inep.gov.br](http://www.inep.gov.br)

