

Brazil - Educational System—Overview

Brazil has 26 states and the Federal District. The educational system is a collaborative organization between federal, state, and municipal government organizations. The federal government, through the Ministry of Education (also known as the MEC—*Ministério da Educação*—with the "C" appearing as an initial because the MEC was also previously in charge of Culture), is responsible for legislation and financial assistance. It is in charge of the federal universities, middle school technological education, and technical and agricultural high schools. Eight years of fundamental schooling is now compulsory.

Brazil - Preprimary & Primary Education

Preschool Education: Preschool is designed to provide physical, psychological, and intellectual development for children under the age of six. It complements family education. There are day care nurseries for children who are up to three-years-old, and kindergartens for those age four to six. This system started with the Constitution of 1988 and is fostered by the municipalities. Although emphasized by the government, its implementation reaches only 17.5 percent of the population. The enrollment was 5.9 percent in 1980 and rose to 17.4 percent in 1989.

Special Education: Special education is offered from preschool to secondary level. Support for special education is provided by the Ministry of Education, by the state, by some municipal secretariats, and by nongovernmental organizations. Depending on the kind of program, an institution might include rehabilitation centers, clinics, hospitals, and more. According to 1989 statistics, 63 percent of the special education students were mentally retarded, 14.4 percent had hearing problems, 9.3 percent were physically handicapped, and 4.4 percent had visual deficiencies. There is much interest in aiding blind students or those with subnormal vision at an early stage to increase academic performance.

Elementary Education: Elementary education is called *escola de primeiro grau* (first degree schooling). It is constitutionally mandatory for students aged 7 to 14. Its main objectives are to develop reading, writing, and calculating; to understand natural laws and social relations in contemporary society; and to develop the capacity of thinking and creating. State Councils of Education structure the elementary school curricula. The curriculum includes: communication and expression (Portuguese language); social studies (geography, history, and social and political organization); and sciences (mathematics and biological). In 2001, about 91 percent of students from seven to fourteen had access to schooling. Recent data indicates that about half of first graders fail, which causes about 2.3 percent of them to abandon school. This index reaches 32 percent by the end of the fourth grade.

A public educational policy for indigenous schools exists to prepare teachers to teach the native people, to produce didactic material, and to disseminate indigenous themes in schools. Indigenous education is part of the Constitution of 1988. Children go to school half a day, either in the mornings or in the afternoons. In 1984, the state government of Rio de Janeiro created the *Centro Integrado de Educação Popular* or CIEP (integrated center for popular education) for the poorer population. The purpose was to keep the students busy eight hours every day with instruction, sports, medical assistance, food, and cultural activities. These schools were especially built with a uniform architectonic project and were easily recognizable. This idea was followed by the government of President Fernando Collor de Melo under the name *Centro Integrado de Atendimento à Criança* (CIAC). Although the idea was excellent, its costs were too high and there were not enough qualified teachers and staff. The project slowly faded, with pieces of it being picked up by other programs.

At the turn of the millennium, the government was placing major emphasis on elementary education. In 1996, the Constitutional Amendment 4 created *Fundo e Manutenção e Desenvolvimento do Ensino Fundamental e Valorização do Magistério* or FUNDEF (Fund for Maintenance and Development of Basic Teaching and Valuation). One of the purposes of this fund was to train teachers and raise their salaries. The average national salary increase was 13 percent, 50 percent in the municipal systems.

The *Programa Nacional do Livro Didático* or PNLD (National Textbook Program) was broadened and renovated, and in 1999, about 110 million books that had been selected by the teachers themselves were distributed to elementary schools from the first to the fourth grade. Throughout the country, there is an ongoing pedagogical evaluation, which started in 1996. The *Secretaria de Educação Fundamental* (SEF) prepares the *Guia de Livros Didáticos*, a guide to help choose the right books and to ease the teacher's task.

Adult Education: Adult education is remedial schooling. The minimum age is 18 for the elementary level and 21 for the secondary level. The Ministry of Education and the state secretariats provide support for this kind of education through special courses, equivalent to the American GED, that can be taken in schools or online. Supervision is handled by state boards of education and inspection services. For the students who successfully complete the course, a diploma is granted.

Popular Education: Popular education is a new concept of teaching created by the educator Paulo Freire. His method was successful in teaching literacy in 40 hours of classes without any didactic material. He conceived education within the existential reality. For him, reading and writing is a social *praxis*. Dialogue is the key for interaction between teacher and students.

Freire's model revolutionized traditional schoolroom teaching, transforming adult education into a healthy approach for those students who come to class already knowing what they want and need to learn. His model is reflected in the work of adult educators in the United States and in other countries, principally in Africa. Paulo Freire's main books are *Cultural Action for Freedom* (1970), *Education as the Practice of Freedom* (1976), and *Pedagogy of the Oppressed* (1993). This model is called "educación popular" in Latin America, "andragogy" by Malcolm Knowles, or "action learning" by learner-centered education proponents. Jane Vella, an educator who adapted Freire's model, explains the characteristics of popular education as:

learner's participation in naming content via needs assessment, mutual respect, dialogue between learner and teacher and among learners, achievement-based learning objectives, small-group work to engage learners and to provide safety, visual support and psychomotor involvement, accountability of the teacher to do what he or she proposes, student participation in the evaluation of program results, a listening attitude on the part of teachers and resource people, and learning by

Professional Education: Professional education treats the needs of local and regional markets. The curriculum is modular—that is, organized in units as short courses that can be taken by the student in between his or her working schedule at different times. The technical and professional schools issue diplomas for the job market, mainly in industry and agriculture. The market has been giving clear signals that without a secondary diploma the candidate will not get a good job.

Across Brazil, 2.8 million students are enrolled in professional education; 24.1 percent are in industry courses, followed by agriculture, and commerce. There are 33,000 professional education courses, 83.5 percent are on the basic level. There are 5,000 technical and 433 technological courses. Computer science is the most requested course. In total, 3,948 institutions offer these courses, 2,216 of which are technical.

Professional education takes place on three different levels: Basic: courses for young and adult workers. They do not demand previous schooling and its goal is to qualify the student; Technical: for young and adult students who are taking or have already finished their secondary education. Receiving a diploma demands having finished 11 years of basic schooling; Technological: this provides higher education on the undergraduate and graduate level.

Brazil - Secondary Education

According to Law 9,394 of December 20, 1996, secondary schooling is the final stage of basic education. From 1990 to 1998, the enrollment in secondary schools almost doubled, from 3.5 million to 6.9 million students. The yearly increase averaged 11.5 percent.

In 2001, a major reform was being undertaken by the government at the secondary level that focused on contextualization, curricular integration, and flexibility. The reform was established along three lines: it was based on the new federal law of *Diretrizes e Bases* (Directives and Bases); it focused on changing the curriculum in the secondary schools; and it placed an emphasis on the occupational content of the technical schools.

The basic secondary school's objectives are: to consolidate previous acquired knowledge; to prepare the student for high school or technical professions; and to teach the student how to relate theory to practice. The curriculum is organized by the *Conselho Federal de Educação* or CFE (Federal Council of Education) together with the *Conselho Estadual de Educação* or CEE (State Council of Education). Individual schools can select additional subjects.

The curriculum has the same basic subjects as in the elementary school: communication and expression, including a foreign language as well as Portuguese; social studies; and sciences. The curriculum includes five to six subjects, and Portuguese is obligatory. In addition, the curriculum has become more flexible over time—75 percent is established by the government on a national basis, and 25 percent is left to each school's discretion.

There is still a low rate of students attending secondary school—only 16 percent of the population between the ages of 15 and 19 participates. There is an age variation—many youngsters in this age span are still attending elementary school. Many students arrive at the secondary level when they are young adults because they have to work and complement the family's salary. Therefore, secondary schools have become in large part evening schools; 55 percent of the secondary level students enrolled in 1998 attended classes at night.

Brazil - Higher Education

Compared to other Latin American countries, Brazil has not only a respectable number of universities, but they are also better equipped than other countries. In the 1960s it launched a major program to award graduate degrees.

The university system is made up of public (federal or state), Catholic, and private institutions. The structure comprises universities, *faculdades* (colleges), and isolated institutions. The purpose of higher education in Brazil is to implement teaching, research, and extension, although research is principally done in federal institutions. Universities also offer short training courses in many different subjects, serving the university population as well as the community. Private higher education has increased excessively in the last 20 years, creating 300,000 new vacancies for students. As a result, there has been a decrease of quality in these institutions, especially because they are profit-oriented.

The main objective of higher education is to professionalize students. This differs from the American system in which the student goes to college to acquire a general education then opts for professionalization. In Brazil the student immediately selects law school (a five-year course) or medicine (six years).

There are 127 universities in Brazil, 68 of which are public. Of the 894 institutions of higher education, 222 are public. Higher education careers are integrated in blocks (criteria used by CAPES) as follows: *Ciências Biológicas e Saúde* (Biological and Health Sciences), *Ciências Exatas da Terra* (Exact Sciences), *Ciências Humanas e Sociais* (Human and Social Sciences), *Ciências Sociais Aplicadas* (Applied Social Sciences), and *Engenharias e Tecnologias* (Engineering and Technologies).

In 1997, there were 1,945,000 students enrolled in higher education; in 2000 this number increased to 2,125,958. Women comprise 55 percent of the total number. It is estimated that 3 millions students will be enrolled by the year 2002. Once enrolled, 64.2 percent of the students who begin a course in higher education graduate. Most of these students study in private institutions, their average age is 25, and 53 percent of the students are 24 years old when they initiate their graduate studies.

As of 1998 the five largest universities in the country were: *Universidade Paulista* (state of São Paulo), 44,598 students; *Universidade de São Paulo* (city of São Paulo), 35,662; *Unisinos* (Rio Grande do Sul), 25,269; *Universidade Federal do Rio de Janeiro* (Rio de Janeiro), 24,971; and *Pontifícia Universidade Católica* (Minas Gerais), 22,434.

In order to be accepted in a university, students have to pass a competitive entrance exam called *vestibular*. As long as they have finished their secondary education and have a diploma, grades do not factor into university selection. This gives an advantage to socially privileged students who get extra help from private instruction or teachers and do not have to work while studying. This system actually creates a social discrepancy, because rich students end up in federal universities that are free, while lower-income students enter private universities that are paid. In 2001, governmental measures were being launched in order to transform the system. Some universities had started making their own individual *vestibular*, and others had begun taking grades into consideration.

The Federal Education Council (CFE) determines the minimum curriculum and time allotment for the different courses. Each institution has the freedom to include additional subjects. Under the presidency of Fernando Henrique Cardoso, a new legislation to evaluate the performance of institutions was introduced that required students to take an examination at the end of their courses. Those exam results, together with the evaluation of committees of specialists designated by the Ministry of Education, were expected to show how well the institutions and courses were performing. That evaluation would provide the government with data that would help it know where and how to best allocate money and efforts. Additionally, undergraduate teaching was prioritized, as investments totaling 70 million dollars were made to upgrade libraries, computers, and information technology.

In the Constitution of 1988 it was determined that student loans, previously financed by the *Fundo de Assistência Social* (Social Assistance Fund), were to be allocated from the resources of the Ministry of Education and administered by the *Caixa Econômica Federal*. The loans are mainly used by students to pay for tuition through monthly installments.

A financing program called *Financiamento Estudantil* (FIES) was created in 1999. Approximately 700 higher education institutions throughout the country have participated. In 2001, some 102,000 students received aid from this program, with total resources approaching \$225 million.

Graduate schools have always been the jewel of Brazilian education. In the 1950s, the Ford and Rockefeller Foundations gave grants to bring Brazilian students to the United States for their graduate studies. Since then, funds are given by several public agencies to finance graduate studies abroad and at home; these agencies include FINEP, FAPESP, CNPQ, and CAPES.

Many universities have their own master's and doctorate programs. Graduate programs are evaluated every two years and, according to their performance, receive public funds in larger or lesser amounts to promote research and pay fellowships for their students. In 1994, there were 18,900 students working on doctorate degrees; in 1999, that number jumped to 29,900—an increase of 58 percent.

Brazil - Administration, Finance, & Educational Research

Administration: The Brazilian Constitution (1988) stated that education is the duty of the state and that its principle aim would be the total development of the individual, including his or her preparation to exercise citizenship and to qualify for work. The administration of the educational system by the federal government, the states, the Federal District, and the municipalities would follow a number of constitutional principles. For example, it is the responsibility of the Brazilian government to conduct a census of elementary school students, to publicize the enrollment process, and to be responsible, jointly with the parents or guardians, for students attending school.

Private teaching enterprise is allowed by the Brazilian constitution, provided it complies with the general rules of Brazilian education. The state must authorize and guarantee the quality of education provided by any private institution.

The different parts of the federal government—including the Ministry of Education, the states, the Federal District, and the municipalities—cooperate in the organization of the Brazilian educational system. The federal government organizes and finances the federal educational system of the states and of the territories. It grants technical and financial assistance to the states, the Federal District, and the municipalities for the development of their educational systems and provides compulsory schooling on a priority basis. Municipalities act on a priority basis in elementary and preschool education. It is the responsibility of the federal government to manage federal universities, public higher learning institutions, federal centers for secondary technological education, and a number of agricultural and technical high schools. The states direct most of the day cares, kindergarten schools, some elementary and secondary schools, and the state universities. The municipalities act on a more basic level, controlling most of the primary schools, some day cares, and kindergarten schools.

Each educational system is managed by an executive body. In the federal sphere, the *Conselho Nacional de Educação* (National Council of Education) establishes the working rules. The Ministry of Education handles political issues, such as planning and administrative decisions. On the state level and in the Federal District, regulatory functions belong to the *Conselho Estadual de Educação* (CEE). Administrative functions, as well as the control of private education at the primary and secondary levels, are managed by the *Secretaria Estadual de Educação* or SEE (State Secretariats of Education). In the municipalities, the *Conselho Municipal de Educação* or CME (Municipal Council of Education) and the local secretariats or departments of education are responsible for regulatory and administrative functions. Each system is autonomous and hires personnel by means of competitive public examinations, and each manages their resources within certain rules and principles. The federal government, the state, the Federal District, and the municipalities must organize a yearly national plan to integrate actions aimed at the coordination and development of education on various levels.

Finance: Each year the federal government is mandated to apply no less than 18 percent of public expenditures on education. In reality, about 5 percent of the gross domestic product (GDP) is applied. The Federal District, states, and municipalities must apply at least 25 percent of their tax revenues, including those resulting from transfers from the federal government. The federal government contributes 20 percent, the state contributes 50 percent, and the municipalities, 30 percent. Supplementary food and health assistance programs must be financed with funds derived from social contributions and other budgetary funds. An additional contribution called *salário educação* (education salary) is made by companies and constitutes another source of funds for public elementary education. Companies that maintain an in-house educational program for their own employees and dependents may deduct from this fund the amount of money invested in elementary education.

Public funds are allocated to public schools. They may also be allocated to community, religious, or philanthropic schools as long as they prove that they do not seek profit and that they invest their funds in education. These institutions must ensure that their equity is assigned to another community, philanthropic, or religious school, or to the government in case they cease their activities. Funds can also be allocated to elementary and secondary school scholarships for those who are needy, or for whenever a student must attend a private school because there are no vacancies or regular courses at the appropriate level in the public school system nearest to the student's residence. In such cases, the government is required to invest, on a priority basis, in the expansion of its network in that area.

Research & Technology: Brazilian universities are autonomous. They enjoy didactic, scientific, administrative, and financial autonomy, as well as fair management. However, they must follow the principles of coherent teaching, research, and advanced study, which makes them eligible to receive financial support from the government and/or private sponsors. In 2001, one of the problems that the federal universities faced—and which was in the process of being reformed—was the lack of freedom the administrators had to reassign resources. Changing this system would increase flexibility and provide greater autonomy to the universities. However, the matter required a constitutional change, so in the meantime, other legal instruments were being used to ease this problem.

Although educational research in Brazil is conducted by different institutions (universities, institutes, research centers, etc.), research activities are concentrated at public universities. In 1993, some 99 institutions were officially involved in all areas of research. That number more than doubled in 2000 to over 200, and 80 percent of the almost 12,000 groups involved in academic research belonged to public universities.

According to the results of a census organized by the *Conselho Nacional de Pesquisa* or CNPq (National Council of Research) that polled all of the groups involved with academic research in Brazil in the year 2000: 57.0 percent of those groups conducted their work in the southeast region of Brazil, 31.0 percent in São Paulo, and 16.0 percent in Rio de Janeiro; 11.5 percent were affiliated with the Universidade de São Paulo (University of São Paulo); 27 percent of the studies concentrated on the humanities; the most studied fields were health (31 percent) and education (30 percent); 79.5 percent of the groups started their research between 1995 and 2000.

In total, 10 percent of the research conducted by these groups resulted in high quality work, according to international standards. Considering the fact that most of these research groups (almost 60 percent) were still in the formative stages in 2001, the Brazilian government considered the results satisfactory. The most traditional research institutions in Brazil are the independent public agencies CAPES, CNPq, FINEP, FAPESP, and FAPERJ, and two private foundations—*Fundação Getúlio Vargas* (FGV) in Rio de Janeiro and São Paulo, and *Fundação Carlos Chagas* (FCC) in São Paulo.

Coordenação de Aperfeiçoamento de Pessoal de Nível Superior or CAPES (Coordination of Improvement of Higher Learning Personnel) is a public entity linked to the Ministry of Education. It was created in 1951 as a program (*campanha*) and transformed into a foundation (*fundação*) in 1992. CAPES is responsible for the graduate policies and the coordination of education and research on this level by granting scholarships and aid. It is responsible for the formation of highly qualified human resources to teach at the university level, to perform research, and to fulfill professional demands and needs in public and private sectors. CAPES has a system of course evaluation that is highly respected by other national institutions.

The *Instituto Nacional de Estudos Pedagógicos* or INEP (National Institute for Pedagogical Studies), a national institute for educational studies and research, is an independent entity responsible for obtaining, evaluating, and storing the country's education information. It created the *Sistema Nacional de Avaliação da Educação Básica* or SAEB (Evaluation System for Basic Education) to evaluate the performance of elementary and secondary schools. Another innovation is the *Exame Nacional do Ensino Médio* or ENEM (National Secondary Education Examination), which is used to evaluate, give credentials, and promote further studies on entry into the labor market. The exam for higher education (ENC) includes 18 higher-level subjects and 2,700 courses. In 1992, the state of Minas Gerais, took the initiative and created a comprehensive system, testing every school in the state.

INEP's major policies are designed to implement a new funding model for basic education (FUNDEF), to transfer funds directly to public schools (the "Money at School" Program), to expand and decentralize the National School Meal Program, to implement the Minimum Income Program (an education grant), to develop the Integrated System of Educational Information (SIEd), and to expand the *Nordeste* (Northeast) Project through the Basic Education and School Empowerment Fund (FUNDESCOLA).

Brazil - Nonformal Education

The Brazilian educational system has faced many problems throughout its almost 500 years of existence. As a means of finding solutions in this crucial area, the government has developed a considerable number of nonformal and/or informal educational programs.

The federal government has industrial and agricultural technical schools throughout the country. Business associations operate other institutions, such as *Serviço Nacional de Aprendizagem Industrial* or SENAI (National Industrial Apprenticeship Service), and *Serviço Nacional de Aprendizagem Comercial* or SENAC (National Commercial Apprenticeship Service). They correspond to primary and secondary schools and are free of tuition. Training for managers and employers of small business is provided by *Serviço de Apoio às Micro e Pequenas Empresas* or SEBRAE (Service to Support Small Enterprises).

The international community considered the creation of SENAC and SENAI in the early 1940s as a pioneering model for Latin America's educational system. These successful Brazilian institutions offered commercial and industrial training programs, which were adopted by other countries due to their high quality.

Most of the nonformal systems of education in Brazil in the 1960s and 1970s were designed for adult education in an attempt to eradicate illiteracy. Paulo Freire's *Movimento de Cultura Popular* or MCP (Movement of Popular Culture), *Projeto Minerva* (a radio broadcast program), *Movimento Brasileiro de Alfabetização* or MOBRAF (Illiteracy Program), and *Programa Nacional de Teleducação* or PRONTEL (National Program of Television Education) are examples of programs developed during this period.

In the beginning of the 1990s, universities and technical schools started offering a number of short training courses on a diverse variety of subjects, from soccer to philosophy. Currently, in the major cities, both private and public institutions offer programs on secondary level administration and computer programming. There is also competition among private institutions to offer courses in foreign languages and preparation for international examinations like the GRE, the GMAT, and the TOEFL. Additional nonformal governmental projects held by the *Secretaria de Educação Fundamental* or SEF (Secretariat of Fundamental Education) include the establishment of a public educational policy for indigenous schools and the expansion of the curriculum of elementary and secondary schools to include environmental issues.

Contemporary technology has also affected the non-formal education sector in others ways. In the past decade, numerous online educational programs were launched in Brazil. These programs provide students with a demanding, creative, and interactive online learning environment. The UNB (University of Brasília) is one of the governmental institutions that offer a variety of online courses.

On an international level, the Ministry of Education maintains intense technical and financial cooperation to improve educational needs and human resources. It works in close contact with the *Ministério das Relações Exteriores* (Ministry of Foreign Affairs). Productive results have been attained through contact with UNESCO (United Nations Educational, Scientific and Cultural Organization), OEA (Organization of the American States), OEI (Organization of Iberian-American States), BID (Inter-American Development Bank), and BIRD (World Bank). The Ministry of Education also participates in the meetings of the Ministers of Education, in the meetings of Ministers of Education of the community of countries speaking the Portuguese language, in the meetings for Ministers of Education of the Inter-American Council of integral development of the OEA, and in the Conference of Iberian-American Education of OEI.

Distance Education: At the start of the twenty-first century, the Brazilian federal government created the *Secretaria de Educação a Distância* or SEED (Secretariat of Distance Education). This is an example of the government's commitment to modernizing education. SEED strategically applies new technologies and methodologies in order to diversify and raise the standard of education quality.

Television is a major vehicle for education. Distance learning is done with the help of the *TV Escola* (TV School), which reaches 60,000 schools. It is broadcast on a special channel by satellite and provides four hours of programs that are repeated four times a day. *TV Escola* is also a program designed for teachers and is updated by the *Reforma do Ensino Médio* or REM (Reform of Secondary Education). It was created in October of 1999 as an experimental program and proved to be one of the most efficient tools that the Ministry of Education had for updating the methods and resources of primary and secondary level teachers.

Both public and private TV stations offer courses and support programs for basic education. *Telecurso 2001*, for example, which is broadcast by TV Globo, is a program intended to prepare

The *Programa Nacional de Informática na Educação* or ProInfo (National Program for Information Technology in Education), created in 1977, was a program established to train teachers and improve learning through computer technology. Approximately 30,000 computers had been installed in more than 2,000 schools. In 2001, this program was expected to reach 6,000 schools, or 7.5 million students, with a total of 100,000 computers. The pedagogical use of technological equipment is assured by means of the proper training of the teachers of the benefited schools and by linking these computers to the *Núcleo de Tecnologia Educacional* or NTE (Nucleus of Educational Technology). Nearly 20,000 teachers have already been trained for this program and 223 NTEs have been created.

Recognizing the need for skilled educators, a national plan for the expansion of nonformal education was created in 2001 called *Proformação-Programa de Formação de Professores em Exercício*. It is an educational program designed for teachers. The program started in January of 2000 in the states of Amazonas and Bahia and provided training for teachers from the public network who did not meet the established minimum qualification standards required by law. The government plans to qualify 15,000 teachers from the public network.

Programa de Apoio à Pesquisa em Educação a Distância or PAPED (Program to Aid Research in Distance Education) is also an important program for the development of educational alternatives. It was created in 1997 to finance theses and dissertations on long-distance learning projects and/or on new information and communication technologies applied to education.

Brazil - Teaching Profession

It was only in the second half of the nineteenth century that Brazilian federal legislation opened the first professional teaching schools (*Curso Normal*). Male teachers tended to concentrate their training at the secondary level, with an emphasis on subject area specialties. Female teachers tended to be relegated to the primary level. This situation lasted until the mid-1930s, when new legislation created the *Magistério*, a well-defined teaching certification course. Entrance into this program required the completion of all eight grades of primary school. At that time, a primary level education was the minimum requirement for teaching primary school. Subsequently, in the 1950s, secondary level teachers were required to have a college degree.

Census figures from the 1970s and 1980s revealed that teaching, particularly in the early primary levels of education, was an underpaid occupation, although educators were required to invest considerable time in their professional training and credentials. Wage figures for the 1990s are not very different from previous decades. In the state of São Paulo, for instance, the average salary was 5.3 times the national minimum salary for male secondary level teachers and 1.9 times the national minimum salary for females.

Eighteen percent of the Brazilian gross national product is spent on education, with the greater part of this expenditure going to federal universities that do not charge tuition or fees. In 1997, the average beginning primary school teacher earned an average monthly salary of less than US\$200 (this figure was US\$223 for teachers in the state of São Paulo).

In addition to widespread undercompensation, teaching conditions are also difficult. Despite the low wages earned, many teachers work two shifts per day, usually at two different schools. This tight schedule barely provides the minimum salary necessary for survival, and it does so at tremendous cost to teachers and classrooms. Teaching double shifts generally means that teachers have to be prepared for teaching almost 10 classes—or 350 students—a day. Teaching under such conditions has compromised the quality of instruction and led teachers to long term union strikes over the last few decades.

Brazil has powerful teacher's unions. During the 1980s and 1990s, they leaned politically to the left, creating monopolies in forums and conferences and also creating the so-called "ideological patrols." The most active teacher's unions are the regional *Sindicato dos Professores* (SINPROs), *Sindicato Nacional e Democrático dos Professores* (SINDEP), and *Associação Nacional de Docentes de Ensino Superior* (ANDES).

Brazil - Summary

In the 1960s, the so-called "Brazilian economic miracle" accelerated the development of the economy, but education was on a slow pace. This changed radically toward the end of the last century because government realized that growth and productivity are linked to education. Quality was a main concern due to regional disparities in the country. Technology and educational improvement needed to be made to meet the demands of the job market.

In 1999, the number of students in higher education in all of Latin America was 5.6 percent of the population. In Brazil, only half of the students finished elementary school, therefore only a small number of students went to middle and high school. Few students made it into higher education. In 1990, there was just over one vacancy in higher education for each student who finished high school.

Claudio de Moura Castro (2000) points out the advancements made in the 1990s and the necessary steps for the further development of the Brazilian educational system. Some of his considerations are as follows: of those aged seven to fourteen, 97 percent are enrolled in schools. This means that illiteracy is no longer a major issue; In 1998, 63 percent of the students finished elementary school; approximately eight million students attend secondary school, therefore, the number of students applying to higher education has risen at a considerable rate.

Brazil has advanced and has a balanced educational system. But, illiteracy must be reduced. Elementary school still has to improve in quality, consolidating universal access to primary education. Teachers have to be better prepared and paid to meet this challenge. The legislation of higher education has to meet contemporary needs: there have been only a few attempts to implement community colleges, and a country as large as Brazil needs to have more courses offered by distance education (*à distância*) using modern technology. New legislation and decentralization would ease the burden imposed by too many inflexible rules. More money has to be allocated by the federal, state, and municipal governments for the advancement of education. Nevertheless, in comparison to the past, Brazil has taken gigantic steps.

The government is working on current targets and future perspectives. It created a Ten-Year Plan (1993-2003) and redefined the Political Strategic Plan (1955-98) to improve the quality of teaching and to better institutional performance. As the Minister of Education, Paulo Renato Souza (April 11, 2000) states:

Education today can no longer be carried out only in the stages of infancy and youth. Professional updating must be permanent, given the speed of technological evolution. As professional careers are less rigid and clear-cut, they require a very high degree of interdisciplinarity and flexibility in the curricular structure of courses. Incorporating the new technologies of information and communication is crucial and should stimulate the growing use of distance learning as a means of guaranteeing access to professional training and updating.

The Brazilian education system has made important advances since 1995. In educational terms, the government seems to be falling into step with the rest of the world. Since 1995, there has been an expansion in access to elementary education. The proportion of children enrolled in school considerably increased in 1999, as four million new students were added to the system.

Age and grade distortion rates continue to be high in Brazil—47 percent of students could be in higher grades. Nevertheless, Brazil is trying to improve its performance at the elementary education level. The promotion rate, which measures the number of students who are promoted to a higher grade, also increased from 65 percent in 1995 to 73 percent in 1997. During this same period, the number of students repeating a grade fell from 30 percent to 23 percent. The dropout rate also decreased, from 5.3 percent to 3.9 percent.

The expectation of finishing the first level of education has risen to 63 percent, and the average time taken to pass through the eight grades has fallen from 12 to 10 years. Secondary educational level enrollment rose to 57 percent between 1994 and 1999. In 1999 alone, the growth rate was of 11.5 percent. This increase in secondary school enrollments may be explained by the improvements in fundamental education and the increasing demand for better-educated people in the job market.

Regional inequalities are diminishing as well. In the northeast region, enrollment in elementary education has grown by about 27 percent, as compared to 13 percent countrywide. In secondary education, it has increased 62 percent compared to a previous national figure of 57 percent. In the last four years, higher education enrollment has grown in absolute terms more than in the previous 14 years. In 1998, the growth rate was 28 percent more than in 1994.

There has also been marked growth at the graduate level in Brazil. Between 1994 and 1999 the number of students at the master's level increased by 27 percent. The rate at the doctorate's level was even more impressive—around 60 percent. Brazil is producing 14,500 graduates at master's level and 4,600 doctorates per year.

Considering all enrollments at all levels of education, Brazil had approximately 54.3 million students in 2001. One third of Brazil's population was attending school. Public schools were meeting the learning needs of 45.8 million students at the basic educational level, which represents 87.8 percent of all students.

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