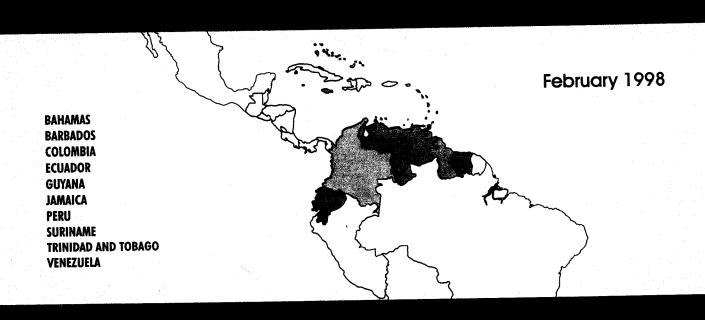
Economic and Sector Study Series

SURINAME EDUCATION SECTOR STUDY





REGION 3
Inter-American Development Bank

SURINAME

EDUCATION SECTOR STUDY

February 1998

This study gives a broad overview of the structure of Suriname's education sector and analyzes its performance and efficiency. In particular, the study contrasts the enormous quantity of resources devoted to education with the meager benefits obtained. It also presents the most comprehensive array of data on Suriname's education sector currently available, to our knowledge. The study disputes the widely-held notion that the severe problems in the sector result from a lack of resources. Instead, it argues that the underlying problem is that resources are not used well because of fundamental deficiencies in the institutional and incentive structure in the education system. This implies that until those deficiencies are addressed, additional resources for the sector will largely be wasted. Conversely, even without additional resources, undertaking the sort of reforms proposed by the study could lead to a vastly enhanced education sector performance.

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Regional Operations Department 3 Country Division 6

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Acronyms

EBO Elementary Vocational

HAVO Senior Secondary Vocational Stream (translated as Pre-University College II)

HBO Higher Vocational Education

LBGO Junior Secondary General Vocational

LNO Vocational Home Economics

LTO Junior Secondary Technical

MEAO Commercial College

MOECD Ministry of Education and Community Development

MPW Ministry of Public Works

MULO General Junior Secondary Education

NATIN Technical College

NPO National Planning Office

OAS Organization of American States

PA Teacher Training College

PTA Parent-Teacher Associations

TTC Teacher Training Colleges

VBO Special Education

VWO Senior Secondary Academic Stream (translated as Pre-University College I)

Executive Summary

This report is part of the Inter-American Development Bank's economic and sector work program and is designed to support the Bank's operational program in Suriname and to contribute to the debate on important development issues facing Suriname.

The education sector in Suriname is facing severe challenges and, in general, its performance is weak. There is a general perception that the education sector's problems result from a lack of resources, and that simply increasing the level of resources directed at the sector will solve the problems. This study disputes both of those notions. Suriname already devotes a greater share of national resources to education than any other country in the Latin American and Caribbean Region. Education absorbs 5 percent of GDP and 30 percent of the government's workforce.

The education system of Suriname comprises pre-school, primary, junior secondary, senior secondary, vocational and tertiary schooling. Upon entry into junior secondary education, students are assigned to one of six streams depending on their sixth grade examination results. Students in the most prestigious stream, general junior secondary, take an examination at the end of grade 10, which determines their assignment into six more streams at the senior secondary level. Tertiary education comprises the University of Suriname and a higher vocational education program, which offers advanced programs in 21 areas.

The education system is highly centralized and is coordinated, managed and regulated by the Ministry of Education and Community Development (MOECD). The MOECD rather than district governments is responsible for the provision of education throughout the country. The MOECD is also the dominant financier of education services. There is little tradition of parental involvement in schools.

The education sector absorbs a considerable share of national resources. Between 1993 and 1996, government expenditure on education amounted to 5 percent of GDP. The sector's absorption of human resources is even greater. Total direct and indirect employment by the MOECD is equivalent to 30 percent of total government employment and 12.5 percent of the country's workforce.

Nevertheless, the apparent strength of inputs to the sector is nullified by an unbalanced allocation between inputs and several factors that reduce the ostensibly strong teacher input: absenteeism, the poor quality and training of many teachers, and low motivation. It is estimated that around 50 percent of teachers are "ghosts" who do not attend work.

The education sector has achieved notable success in ensuring widespread access to basic education. However, the number of well qualified graduates produced by the education system is low. This under-achievement is linked to extremely high drop out and repetition rates, poor quality instruction, lack of educational materials and deteriorated school buildings. Among the students who do graduate, some, particularly those with technical-vocational training, have skills that are only

marginally useful to employers. The system, therefore, poorly equips students with skills with which they can earn a living. Nor does the system provide employers with a skilled, highly productive workforce.

The government in the process of formulating a full plan for educational development. A committee has been appointed to review the education portion of the national multi-year development plan (1993-98) and prepare a new plan.

The major international donors to education in Suriname are the Governments of the Netherlands and Belgium. The major focus of Dutch support has been instructional materials and supplies at the primary level -- particularly in the interior, the development of apprenticeship programs in vocational/technical education, and support for higher education, both for strengthening the University of Suriname and for scholarships for students to study abroad.

The deficiencies in the education system exist despite the generous amount of financial and human resources devoted to the system. The contradiction between resource inputs stems from three immediate problems: misallocation of resources, inefficiencies and waste, and weak teaching capacity. However, these problems are symptoms of more fundamental deficiencies in the institutional structure of the education sector, which are common to many countries in the Latin American and Caribbean region. The combination of so many roles — financier, purchaser, provider, employer and regulator — in one large ministry has created a structure which lacks the appropriate mechanisms to make the system perform efficiently and equitably.

Under the current system the budget is determined by inputs and only very indirectly linked to output or outcomes. Schools, therefore, face very little financial incentive to improve the quality of education services or ensure that inputs are used efficiently. In addition, the current system of funding is highly centralized and providers have no discretion or control over what inputs they can use. The existing institutional structure also diminishes and disperses accountability for performance in the education sector. School principals and officials are not accountable to their major clients, parents of students, for the services they are providing. The concentration of so many functions in the MOECD also hampers its ability to carry out certain tasks such as strategic planning, regulation, monitoring and setting of standards.

Improving the system boils down to giving schools the means to improve performance, giving them incentives to improve performance and holding them accountable for it. Budgeting should be decentralized to let providers have discretion and control over the inputs they use. In addition, resources should be allocated on the basis of outcomes rather than inputs. Putting greater emphasis on performance as a criterion for receiving funds can transform budgets into an instrument for putting pressure on public providers to be efficient. It would also be necessary to ensure that in the process of reallocating responsibilities those that receive decision-making power have the right structure of governance, incentives and ownership to be held accountable for their actions. This would require:

- (i) a governance structure at the school level, preferably with parent and community participation;
- (ii) a budgeting process based on outcomes; and (iii) a standardized examination system.

If the reforms recommended above seem to be too radical for broad implementation, they could be tested or introduced on a pilot basis. A small number of schools could be selected to undergo reforms and then, once success is demonstrated on a small basis, the reforms could be broadened to other schools.

The above changes would allow the MOECD's role to shift from a focus on the provision of education to that of overseer of the education system, strategic planner, regulator and setter of standards. In sum, it would focus on the higher functions which only the Ministry is in a position to do and which, hitherto, have been crowded out by the day-to-day management and operation of the education system.

In addition, it may be beneficial to: review procedures for recruiting student teachers; consider introducing a modest fee for vocational and professional training courses; and thoroughly review the technical-vocational part of the education system. It will also be important to focus on school maintenance and refurbishment of existing buildings rather than embarking on a large program of new school construction.

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A NOTE ON DATA AVAILABILITY, SOURCES, AND ACCURACY

This study presents the most comprehensive data array on Suriname's education sector currently available, to our knowledge. Through the generous help of current and former Ministry officials, this study draws on data (and reports) that are not widely available, even within the MOECD. These include working papers and trend studies that were prepared as part of Ministry work but not formally published by the Ministry. The Statistics Office of the MOECD did not have a Director at the time this study was conducted and, for all practical purposes, was not operational. Much of the data attributed to the Statistics Office of the MOECD for 1993 onward was developed prior to recent staff turnover and were made available to this study by former staff of that Office.

Notwithstanding the above, education data in Suriname is of uneven quality and much data in this report should be interpreted with caution. Data from different sources across ministries and across departments of the same ministry may not agree, though differences tend to be small and of little policy significance. More importantly, some of the most important problems of the education sector are not reflected in the national education data. Most notably, the high incidence of ghost teachers, counting part-time teachers as full time, and failing to adjust for teachers who are legitimately assigned to non-instructional tasks results in an overestimate of teachers providing instruction in the classrooms. Another is that the teacher count may overestimate the number of qualified teachers in the schools.

Prior to 1994, the MOECD Statistics Office provided analysis of school data collected by district inspectors. Effective operation of the Statistics Office ended in 1995 as a result of three factors: (a) loss of key personnel in May 1995; (b) the decision of the MOECD not to replace lost staff in the Statistics Office; and (c) lack of demand for data in the decision making process. Status data (number of students, teachers, and classes) are still collected by district inspectors, who forward those data to the Central Statistics Office which does the summary analysis. The Central Statistics Office reports annual enrollments but does not conduct any further data or policy analysis with this information. For example, it does not compute progression, repetition, and dropout rates, teacher to student or student to class ratios. Consequently, the MOECD has no effective way of monitoring quantitative indicators of the education system performance (beyond basic enrollment statistics).

Nonetheless, the issues and trends outlined in this report are of such a magnitude that even moderate levels of error in the data will not change the policy implications.

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1. Introduction

This report is part of the Inter-American Development Bank's economic and sector work program and is designed to support the Bank's operational program in Suriname and to contribute to the debate on important development issues facing Suriname.

The developmental importance of investment in human capital, in general, and education, in particular, is rarely disputed now. Empirical research has demonstrated that initial levels of education strongly influence the GDP growth rate of countries (Barro 1993) and widespread access to basic education has been shown to foster broad based and more egalitarian growth.

Despite these sound theoretical underpinnings for public investment in education, and a widespread consensus in Suriname that education is important, the education sector in Suriname faces severe challenges. The allocation of inputs into the sector is gravely unbalanced, thereby undermining the efficiency of those inputs. From 1993-1996, 88.5 percent of the education budget was spent on personnel expenses. By contrast, less than 4 percent of the budget was spent on supplies, causing severe shortages of furniture, textbooks and instructional materials. Less than 2 percent of the budget is spent on maintenance and repair. As a consequence, the Technical Services Directorate of the Ministry of Education and Community Development (MOECD) estimates that 60 percent of the government schools need repair. Many facilities are without water, working toilets or blackboards.

Nor does the generous allocation to personnel expenditures result in high quality teaching. First, much of the expenditure on personnel is not spent on teachers partly because the MOECD employs approximately one non-instructional staff member for every 2.5 teachers. Second, it has been estimated that as many as 50 percent of teachers do not come to work. Third, those teachers who do come to work are recruited from the weakest academic students, receive weak teacher training and often have little interest in the job. One-third of primary school teachers do not have adequate teacher preparation. Teacher training officials estimate that less than one percent of incoming students have any interest in teaching as a career.

Given these problems, it is not surprising that the performance of the education system is, in general, weak. The system is plagued by extremely high dropout and repetition rates. About nine of every 10 children begin school, but less than four in a thousand can expect to finish senior secondary school 12 years later. Many of the students who do eventually graduate lack the skills to contribute fully to the national economy and require training by employers. Against these deficiencies, must be set the education sector's success in ensuring widespread access to basic education. Suriname's enrollment ratios at the pre-primary and primary levels are high relative to the rest of Latin America and the Caribbean.

There is a general perception that the education sector's problems result from a lack of resources, and that simply increasing the level of resources directed at the education sector will solve the problems. This study disputes both of those notions. Suriname devotes a greater share of national resources to education than any other country in the Latin America and Caribbean Region. Education absorbs 5 percent of GDP and 30 percent of the government workforce. The underlying problem is that these resources are not used well because of fundamental deficiencies in the institutional and incentives structure in education. Until those deficiencies are addressed, additional resources for the sector will largely be wasted. Conversely, even without additional resources, undertaking the reforms proposed in this study could lead to a vastly enhanced education sector performance.

2. Structure of the Education Sector

2.1 The Education System

The education system of Suriname comprises preschool, primary, junior secondary, senior secondary, vocational, and tertiary schooling. Figure 1 presents a chart describing the program of study within the formal education system and the options available to students as they move through the system.

The school year begins October 1 and ends August 17. The school day runs from 8:00 am to 1:00 pm for primary students; 7:30 am to 1:00 pm for junior secondary students; and 7:00 am to 1:00 pm for senior secondary students.

2.1.1 Pre-school

Pre-school is a two-year program for four and five year old children. Approximately 90 percent of all four and five year old children are enrolled in pre-school programs (see Appendix 1). The 20,979 children enrolled in pre-primary in 1993 were taught by about 672 teachers (Annex Tables 1 and 2). This resulted in an average class size of 28 students, though there is wide variation across schools. Pre-school programs typically are housed in primary school buildings, though they have their own teachers, who take a special training program to prepare as a pre-primary teacher. There is no set national curriculum for the pre-primary level; each teacher develops her own (virtually all the teachers are women). As a result, teachers draw heavily from the pre-primary curriculum taught at the Teacher Training College for their inspiration and lesson plans. Student promotion from first to second year and from second year to primary school grade 1 is automatic and virtually all pre-school children continue on to primary school.

2.1.2 Primary school

Primary school consists of grades 1-6 (ages 6-11). Suriname has not experienced the explosive growth that has characterized student enrollments in many other developing countries over the last ten years. In 1993, approximately 79,162 students were enrolled in primary school, an overall increase of only 7.7 percent (5,513 students) over the previous ten years (see Annex Table A-3). About half of those students were enrolled in religious schools. Successful completion of primary school is based on an examination administered nationwide at the end of grade 6 in combination with sixth grade school performance. Those awarded a Primary School Leavers' Certificate may continue to *Junior Secondary School*, with their choice of junior secondary options based on their examination scores.

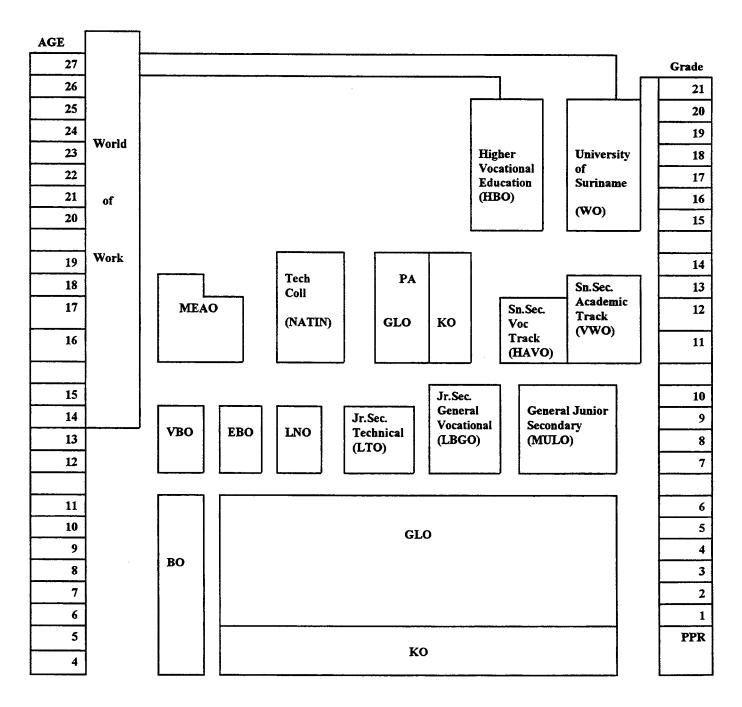


Figure 1
Structure of the Suriname Education System

2.1.3 Junior secondary education

Secondary education in Suriname is divided into two levels: *junior secondary education*, which generally lasts for three to four years, and *senior secondary education*, which lasts for two to three years. Upon entry into *junior secondary education*, students are assigned to one of six streams depending on their sixth grade examination results.

Students with the highest sixth grade examination performance can attend General Junior Secondary Education (MULO), which is a four-year general education stream. Instruction is offered in 11 subjects: Dutch, English, Spanish, accounting, mathematics, physics, biology, geography, history, drawing and physical education. Most subject areas rely on Dutch textbooks. Locally prepared textbooks and instructional materials are available for Spanish, history, physics and for a portion of geography.

Those with a lower score may attend a four year Junior Secondary General Vocational (LBGO) stream. LBGO is essentially a pre-professional stream leading to further education. Students with scores that are insufficient for the LBGO stream may attend "true" vocational streams. Of these, the most prestigious is the three-year Junior Secondary Technical (LTO) schools, which are oriented toward technical trade skills (carpentry, automobile mechanics, etc.).

Those with yet lower scores may attend an Elementary Vocational (EBO) school, a Vocational Home Economics (LNO) school, or a Special Education (VBO) school. The Elementary Vocational schools are aimed at imparting general handyman skills while Vocational Home Economics prepares girls in domestic home-making skills. These vocational programs do not generally lead to further educational options.

Of the 26,157 students enrolled in junior secondary education in 1993/94, 49 percent were enrolled in the MULO stream, 32 percent in the LBGO stream (the two streams that have the possibility of leading to further educational options), and 19 percent were enrolled in the terminal vocational and technical options.¹

2.1.4 Senior secondary education

Students in the general junior secondary (MULO) stream take an examination at the end of grade 10. Those passing the test can continue in senior secondary education, but again their options are determined by their examination score. Students with the highest scores can enter a three-year senior secondary academic stream (VWO, translated as Pre-University College I), which offers academic programs leading to university study.

Consistent data regarding junior secondary enrollments is scarce and the enrollment data should be considered "best estimates".

Those with lower scores may enter a two-year senior secondary vocational stream (HAVO, translated as Pre-University College II). HAVO schools are really pre-professional schools intended to lead to further education in areas such as law, journalism, etc., and are not vocational schools in the more general sense.

The pre-university and pre-professional streams are offered in different schools, though in one case they share a building. Both types of school offer instruction in Dutch, English, Spanish, mathematics, physics, biology, geography, history, drawing, and physical education, though the two streams cover the material in different depths. Students in the VWO stream take school completers' examinations in seven subjects while those in the HAVO stream take examinations in only six subjects. Most subject areas rely on Dutch textbooks. Locally prepared textbooks and instructional materials are available for Spanish, history, physics, and for portions of geography and biology.

Students with scores that are insufficient for the pre-university or pre-professional streams may attend "true" vocational streams. Of these, the most prestigious is the four-year **Technical College (NATIN)**, which is oriented toward technical trade skills. Only about one in every three students who enroll in **NATIN** actually graduate.

Those with yet lower scores can enter a four-year Teacher Training College (PA), where they can specialize in primary teacher training, or they may go to a Commercial College (MEAO) for either a three-year program in accounting and general management or a two-year program in secretarial skills. There are also options for less academically able students to attend a Junior Secondary level elementary vocational program (EBO), a vocational home economics program (LNO), or a special education program (VBO).

At both the *senior* and *junior secondary levels* the curricula for vocational programs of each school are largely determined by the instructional faculty of that school. There is little, if any, articulation between the vocational and technical skill training offered and the needs of local employers. Curricula are not based on a labor market analysis nor is instruction based on locally conducted task analysis.

There have been recurring efforts to establish apprenticeship programs with local companies but the scale of these efforts is still small. The Netherlands is assisting in supporting these programs and there is considerable interest among vocational educators in revitalizing and extending these programs over the next few years.

Of all the students enrolled in senior secondary education in 1993/94, 41 percent were enrolled in the VWO pre-university stream, 15 percent in the HAVO pre-professional stream, 11 percent in a NATIN technical college, 16 percent in teaching training colleges (PA) and 17 percent in a commercial college (MEAO).

2.1.5 Tertiary education

Tertiary education is comprised of two tracks: the University of Suriname (which possesses a medical school) and higher vocational education (HBO), which offers advanced programs in 21 areas, including advanced teacher training. Students with a School Completer's Certificate from a VWO (senior secondary academic school) may enter the university and students with a School Completer's Certificate from a HAVO (senior secondary vocational school) may continue on to the higher vocational education.

For the brightest students in the HAVO stream and the technically-oriented senior secondary (NATIN) schools there is also a possible route to the university. After taking their school completer's examination, students in these tracks can enter a one-year preparatory course of study at the university which leads to full admission for those who complete the course. In fact, this university entrance examination is the same school completers' examination taken by students completing grade 13 at the academic senior secondary schools (VWO). This option has the effect, then, of giving students in the HAVO and NATIN streams another chance at entering the university, but it does not save them any time because the grade that they skip at senior secondary school is replaced by an extra year of study once they are admitted into the university.

In 1993, 2,463 students were enrolled in the University of Suriname (nearly as many as enrolled in the academic senior secondary stream); 183 were enrolled in the Academy of Arts (which offers advanced professional training); and 1,339 were enrolled teacher training (see Annex Table A-17).

Curricula are determined by the instructional faculty of each institution and are intended to meet international standards. International assistance has supported curriculum development, advanced education for faculty, and the provision of library resources and specialized laboratory and other teaching equipment.

2.2 The Ministry of Education and Community Development

The education system of Suriname is highly centralized and is coordinated, managed, and regulated by the MOECD. The MOECD is also the dominant financier of education services. The MOECD is organized into four directorates, in line with its four major areas of responsibility -- education, culture, sports, and youth (see Figure 2 for the organizational chart of the ministry). Each of the directorates is headed by a permanent secretary with an assistant permanent secretary for each of the major functions within each directorate. Across the Directorate of Education, there are assistant permanent secretaries for Development Services, Education, Technical services, and Administrative Services. These four directorates are then organized into a total of 25 bureaus.

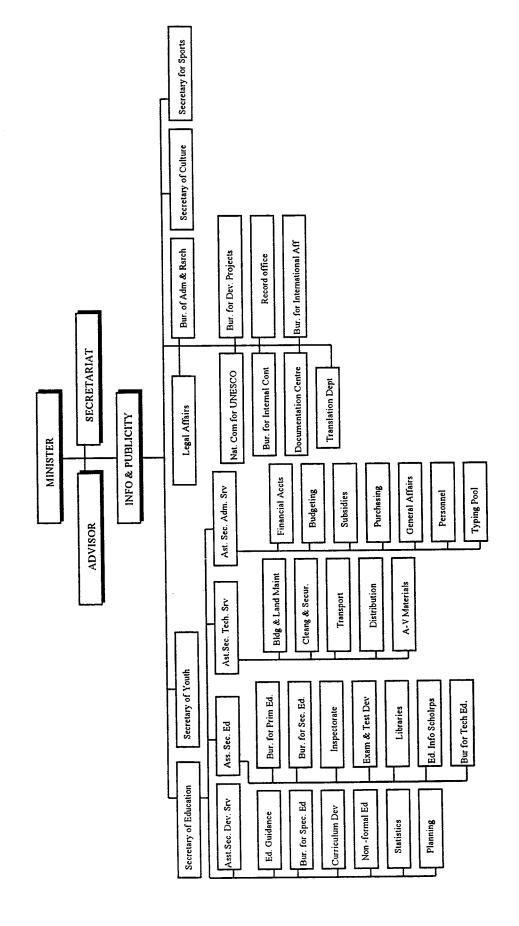
The MOECD rather than district governments is responsible for the provision of education throughout the country. The ministry is represented in each of Suriname's 10 administrative districts

by a district inspector, who reports to the Chief Inspector in the ministry in Paramaribo, who, in turn, reports to the Assistant Permanent Secretary for Education. District inspectors have few if any staff -- those in the more populated districts may have a secretary. Originally intended to provide teacher supervision, their responsibilities have evolved to the point that they now handle virtually all administrative issues that involve the central ministry in the district. For example, they deliver and collect school data forms, forward school complaints about missing or inadequate supplies or furniture to the appropriate office of the central ministry, and respond to concerns about teacher performance. They operate as a first line of communication between a school and the ministry.

District inspectors for the coastal districts of Suriname generally live in their districts. Their housing is provided by the ministry and includes an office. Inspectors responsible for districts in the interior live in Paramaribo. In one respect, this makes sense, since transportation in the interior is mostly by river or air, and virtually all air connections have to go through Paramaribo. However, limitations on travel funds result in little, if any, on-site school visits to interior districts. Even in the coastal districts, inspectors ability to visit schools is seriously constrained by financial limitations. Inspectors are expected to use their own private vehicles for school visits. They receive Sf.6,250 (US\$15.63) per month in car allowance to cover petrol and related expenses. This is inadequate to cover the true costs and, as a consequence, few school visits occur.

The lack of school visits is compounded by the fact that few schools have phones, even in districts close to Paramaribo. Offsetting this weak formal structure is a strong informal structure. Teachers and headmasters in rural districts are given a trip to Paramaribo each year as part of their incentive to work outside the capital and often have direct communication with central ministry personnel when they are in the city.

Figure 2
Organizational Chart of M.O.E.C.D



2.3 Religious schools

About half of all primary and junior secondary schools are operated by religious organizations, mostly Hindu, Muslim or Catholic, that operate with substantial government subsidies. The religious organizations provide and maintain the school facilities, which are usually in somewhat better repair than the government schools. The religious organizations recoup maintenance costs by charging students a higher entrance fee (about Sf.2,500 [US\$6.25] per year) than do government schools (Sf.500 [US\$1.25] per year). Religious school teachers are recruited, selected, and hired by the religious organizations, but must be selected from the same pool of the country's teacher training college graduates. None of the religious schools use expatriate teachers.

But in all other respects the religious schools are comparable to government schools. They follow the national curriculum and use the same textbooks prescribed for public schools. Similarly, they depend on the MOECD for delivery of the textbooks and instructional materials. Their teachers are paid by the government on the same pay scale as other government teachers. The Christian schools have some foreign sponsorship, but the Hindu and Muslim schools do not. Given the similarities, it is unlikely that religious schools provide significantly better quality instruction than government schools.

Schools supported by religious organizations are an integral part of the national education system and data about these schools generally are not disaggregated in government statistical reports. For that reason they are considered together with public schools in the remainder of this report.

2.4 Parental involvement

There is little tradition in Suriname of parental involvement in their local schools. While some schools have a core of interested and involved parents, most do not. The MOECD has, in the past, made efforts to increase parent involvement. While the results were disappointing, the experience offers some insight into the dynamics that operate in efforts to involve parents: In the 1980s, the MOECD launched a special program to promote parental participation through the creation of Parent-Teacher Associations (PTAs). PTAs were started in 295 primary and 155 junior secondary schools; however, parental activities were limited largely to fund raising for their school. The schools used the proceeds of the fund raising to purchase school materials (such as writing materials). Parents in the poorer neighborhoods did not have much time to participate in PTA activities because of the long hours they spent working. However, about 40 percent of those parents said that they would have made time if they also could have discussed the problems their children were encountering with the teacher, the curriculum, and instructional practices in the classroom. Teachers and headmasters resisted parental involvement in these matters. In the end the PTAs were not sustained, largely because parents did not see them as providing them with meaningful involvement in the activities of schooling.

2.5 Trade unions in the education sector

Teachers and other workers in the education sector are represented by a number of trade unions. Six unions represent teachers in religious schools and have a religious basis (see Table 1 below). Four of these unions have less than 150 members and their combined membership totals 1,930. Teachers in state (secular) schools are represented by the Suriname Public Teachers'Union (S.O.B.) which has a membership of approximately 2,220. However, unions are also configured on the basis of the level or function of schools. Teachers at secondary schools are represented by the Union of Teachers (B.V.L.) and teachers at technical schools are represented by the Technical Schools Teachers' Union (B.L.T.S.). Teachers' unions also operate at different levels of aggregation. All teachers' unions, except the B.V.L., are members of the Federation of Surinamese Teachers (F.O.L.S.) which is an umbrella organization representing all teachers in Suriname. In addition, because nearly all teachers are civil servants, all teachers unions -- except the B.V.L. which withdrew after a disagreement -- and the F.O.L.S. are also members of the Confederation of Civil Servants' Organizations (C.L.O.) which represents all civil servants. The most important unions in terms of negotiating with the government are the C.L.O., the F.O.L.S., the B.V.L. and the S.O.B..

TABLE 1 Trade Union Representation in the Education Sector (As of March 1998)		
UNION/ORGANIZATION	ACRONYM	MEMBERSHIP
Confederation of Civil Servants' Organizations	C.L.O.	-
Federation of Surinamese Teachers	F.O.L.S.	
Teachers in State (Secular) Schools		2,200
Suriname Public Teachers' Union	S.O.B.	2,200
Teachers in Religious Schools		1,930
Catholic Teachers' Union	K.O.B.	900
Central Teachers' Union (Moravian schools)	C.O.B.	700
Union of Arya de Waker (Hindu schools)	O.A.D.	130
Union of Teachers at Sanathan Dharm (Hindu schools)	B.O.S.	114
Islamitic Teachers' Union	I.O.B.	50
Suriname Moslem Association Teachers' Union	O.B.S.M.A.	36
By Level of Teaching		750
Union of Teachers (Secondary schools)	B.V.L.	350
Technical Schools Teachers' Union	B.L.T.S.	400

3. Inputs in the Education Sector

The education sector absorbs a considerable share of national resources. Between 1993-1996, government expenditure for education amounted to 5 percent of GDP. The sector's absorption of human resources is even greater. The MOECD is the largest government ministry, employing approximately 3,272 staff in non-instructional positions and about 4,238 teachers. It also pays the salaries of another 3,711 teachers who teach in religious schools. Total direct and indirect employment by the MOECD, therefore, amounts to 11,221, which is equivalent to 30 percent of total government employment and 12.5 percent of the country's workforce. Nevertheless, the apparent strength of inputs to the sector is nullified by an unbalanced allocation between inputs and several factors that reduce the ostensibly strong teacher input.

3.1 Financing and expenditures

As in most of the region, education is primarily public funded. In Suriname this reflects not only a broad public consensus that the state should ensure the provision of education but also constitutional guarantees to free access to education (see Box 1).

Box 1

EDUCATION IN THE CONSTITUTION

EDUCATION AND CULTURE Article 38

- 1. Everyone has the right to education and cultural expression.
- Education shall be free, subject to State supervision of all public educational institutions, in order that the national education policy and the educational
 standards laid down by the State shall be observed.
- 3. The practice of science and technology shall be free.
- The State shall promote the kind of education and the conditions under which school education and other forms of education can contribute to the development of a democratic and socially just society.
- 5. The State shall promote the democratization of culture by promoting the enjoyment of culture and cultural creativeness, and by guaranteeing the accessibility to those cultural creations to all citizens by means of cultural and recreational organizations, information media and other suitable channels.

EDUCATION Article 39

- 1. The State recognizes and guarantees the right of all citizens to education and shall offer equal access to education to all.
- 2. In the execution of its education policy the State shall be obligated:
 - a. to guarantee compulsory and free elementary education;
 - b. to guarantee sustainable education and to eradicate illiteracy;
 - c. to grant access to the highest levels of education, scientific research and artistic creation to all on the basis of merit.
 - d. to provide, in phases, free education to all levels,
 - e. to harmonize education with the productive and social needs of the society.

Source: The Constitution of the Republic of Suriname, 1987.

Public Funding

The education system is financed through central government revenues. Between 1993-1996, government expenditure for education amounted to roughly 5 percent of GDP (see Table 2), which is slightly above regional norms. For example, in the mid-1990s Trinidad and Tobago spent 4.3 percent of GDP on education, Guyana 3.7 percent, Barbados 6.8 percent and Jamaica 5.1 percent². In 1990, public expenditures on education amounted to 4.3 percent of GNP in Latin America and the Caribbean, 4.1 percent in East Asia, and 5.7 percent in industrial economies (UNESCO and World Bank as reported in IDB, 1996).

	1993	Government l 1994	1995	1996
MOECD expenditure/Government expenditure (percent) 1/	11.9	11.8	12.9	11.7
MOECD expenditure/GDP (percent)	5.1	5.2	4.8	5.1

Financing is centralized in the MOECD, which allocates in-kind services rather than money to schools. The MOECD, therefore, is responsible for the provision and distribution of teachers, supplies, and school maintenance to schools. The university has more financial autonomy than the schools and prepares and manages its own budget, although the current expenditure budget is vetted by the MOECD before being submitted to the Ministry of Finance. Funds from the Ministry of Finance and foreign donors pass through the MOECD before they reach the university.

The overall budget for education is determined by negotiations between the MOECD and Ministry of Finance. Funding is determined by inputs or installed capacity rather than by outputs or performance. It is calculated by multiplying the number of civil servants and teachers who work for the MOECD (or whose salaries are paid by the MOECD) by their salaries and adding on some expenses for other inputs and running costs. Actual expenditure outcomes can be very different from the planned budget if civil servants and/or teachers are given large salary raises during the year. This occurred frequently during the high inflation period of 1993-1995 (see Annex Table A-33). In 1994, for example, actual spending was forty times the budgeted level, indicating that the quantity of inputs determine the budget rather than conscious budgetary decisions determining the quantity of inputs.

Guyana data does not include expenditure on tertiary education. However, it is still a relevant comparator, since much of Suriname's expenditure on tertiary education is financed directly by donors and hence not included in the 5 percent of GDP estimate for Suriname government expenditure on education.

3.1.1 Payments by users

Recipients of education services pay a small fraction of the cost of education. Tuition is virtually free at all levels of education, with schools charging only a modest entrance free (\$1.25 per year for government schools and \$6.25 for religious schools). The "no tuition cost" policy at the tertiary level is currently under review, and MOECD and university staff are investigating the feasibility of a student loan program. Both issues, however, are at early stages of considerations.

Families of children do, however, cover complementary expenses. Families of students must provide a school uniform, contribute to the child's transportation to school, and provide notebooks and pencils that the government has been unable to provide. Students attending teacher training colleges pay for all the supplies they need to complete their practice teaching as well as transportation costs.

Some of the research institutes at the university have been able to sell research and development services. However, these efforts have been inadvertently discouraged by a university policy which routes the resulting income to the central administration of the university rather than the research unit generating the funds. Moreover, when clients provide an advance payment for work they have commissioned, those funds are sometimes diverted by the university to cover other costs, making it difficult or impossible for the research unit to initiate the activities.

3.1.2 Allocation by level of education

The MOECD does not keep its accounts in a manner that allows for disaggregation of expenditures by level of education (pre-primary, primary, secondary, vocational/technical higher education). However, a crude estimation of the balance of expenditures between tertiary education on the one hand, and other levels of education on the other hand, can be derived by comparing the university budget with the total MOECD budget. In recent years, the university share of the MOECD budget has varied from 9.3 percent in 1993 to 7.7 percent in 1995. Suriname, therefore, commits less to tertiary levels relative to pre-primary, primary and secondary level than many countries in Latin America, which allocate between 20-40 percent of public current expenditure on education to the tertiary level. Suriname is in line with other Caribbean countries which allocate between 3.4 percent (Belize) and 21.4 percent (Jamaica) to tertiary education.

However, this refers only to national expenditures on education. Much international donor assistance has been directed at the university and the entire capital budget of the university is donor financed and not included in the statistics on national government expenditures on education. As a result, total funding of the university is much higher relative to primary and secondary levels than solely national expenditures data would indicate.

3.2 Non-instructional staff of the MOECD

The MOECD employs approximately 3,272 staff in non-instructional positions. Officials estimate that about 2,000 are grounds keepers, guards, and other support personnel and that about 1,300 are office personnel. This is probably an underestimate of the administrative staffing because: (a) some teachers are assigned to non-instructional responsibilities but continue to be paid (and counted) as teachers; and (b) religious organizations handle many of the administrative matters (teacher recruitment, teacher assignment, building maintenance and repair) for about half the primary and junior secondary schools in the country. The MOECD employs approximately one non-instructional staff member for every 2.5 teachers.

3.3 Teachers

On the surface, the teaching corps, which numbers 7,949, is large. However, in practice this ostensible strength is weakened by absenteeism, the poor quality and training of many teachers, and low motivation.

3.3.1 Quantity

In 1993, the total teaching pool included 3,695 primary teachers, approximately 808 general junior secondary school teachers, another 547 teaching in junior secondary vocational school, and 331 teaching in the various terminal junior secondary options. To provide adequate content coverage of the eleven subject areas composing the curriculum, junior secondary schools use part-time teachers, some of whom teach at several different schools, making an accurate count of teachers difficult. About 70 percent of the full-time general junior secondary teachers are women, though when all junior secondary options are combined, the proportion of men and women is about equal (since most of the other options are vocational/technical areas in which male teachers tend to predominate). At the tertiary education level much of the instruction is provided by part-time instructors. For example, the 99 full-time faculty at the University are supplemented by 167 part-time instructors (see Annex Tables 19 and 20).

Such staffing levels imply low pupil to teacher ratios: about one teacher for every 22 students at the primary level and one teacher for 12 students at both the junior and secondary levels. These ratios are low by international standards (see Annex Table A-21a), and belie the reality of the classroom where class sizes appear closer to 35-40. This discrepancy is explained by three factors. First, some people classified and paid as teachers are performing other jobs within the ministry or the school and are not providing direct instruction. Second, there are problems in the MOECD's data—some part-time teachers are counted as full-time. Third, and probably most significant, many teachers do not come to work or meet their classes. Described as "ghost teachers", these individuals continue to receive their salary and benefits, but either hold other jobs or pursue leisure activities. Senior MOECD officials suggest that the number of ghost teachers and others employed through the

education ministry is as high as 50 percent. An informal audit of school grounds keepers by a senior MOECD official in 1996 found 50 percent to be ghost employees.

Three factors help explain the prevalence of ghost teachers. First, ghost teachers continue to maintain their rights to their teaching job in order to keep their health insurance, an important fringe benefit in Suriname. Second, even though teachers' salaries are considered low, they are higher than other civil servants. Ghost teachers can continue to draw their salary. Third, there are few, if any, consequences for not coming to work or not performing one's job. In part this is because the MOECD does not have the management capacity to monitor teacher attendance. However, when evidence of ghost employees has been forwarded to the ministry, little or no action has been taken to correct the situation. Some believe there is official reluctance to correct the situation. More fundamentally, it reflects the lack of incentives and control at the school level. Schools have little incentive to enforce teacher attendance because they are not accountable to pupils' parents or the ministry for lost instructional time. Schools also have little means to enforce teacher attendance because teachers' salaries are paid by the ministry.

Finding teachers willing to serve in the interior and in some of the more distant coastal districts has been a long-standing problem. Teachers in interior schools are provided with housing and are given a trip to Paramaribo each year but these incentives have not been strong enough to attract and retain teachers in the interior.

To address teacher shortages in the interior, in 1984 the MOECD initiated a pilot program, known as the "boslandakte program", to recruit local community members from interior villages who had at least some junior secondary education to attend a special six month training program that would prepare them to teach in their local village. However, the subsequent civil war caused many teachers and boslandakte graduates to flee the interior.

Following the termination of hostilities in the interior and confronted with severe teacher shortages, the boslandakte initiative was reactivated in 1992. The results of the program have been mixed. When the program did not attract enough trainees from the interior districts, the program was opened to individuals from coastal areas. Upon completion, however, many of the trainees from the coastal areas refused to go to the interior. Overall, 60 percent of the 280 students who have participated in the program since 1993 have passed the exam and are teaching. While this has alleviated somewhat the shortage of teachers in the interior, boslandakte teachers receive only 6 months of training compared with four years for the regular teacher training programs.

MOECD officials do not have current data on teacher turnover, but estimate that about 20 percent of the teaching force leave teaching each year due to marriage, death, emigration, and better opportunities in the private sector. This translates into an annual demand for about 739 teachers at the primary level, 165 teachers at the junior secondary level, and about 116 teachers across various types of schooling at the senior secondary level.

While there are about 680 students enrolled in Teacher Training Colleges (TTCs) that prepare primary and junior secondary teachers, these colleges produce about 40-45 graduates per year [Some

transfer to the Advanced Teacher Training Institute before graduating from the TTC] (see Annex Table A-21). The Advanced Teacher Training Institute, which prepares upper junior secondary and senior secondary teachers enrolled 769 in the first year program in 1994-95 and graduated about 176 that same year (Annex Tables 23 and 24). In total, these schools produce about 210 new teachers per year. Senior education officials suggest about 50 percent of those who graduate will actually take a teaching position.

This suggests a shortfall in teacher production, particularly for the primary and junior secondary levels. However, to the extent that the teacher ranks are inflated by ghost teachers, fewer new teachers would be necessary if ghost teachers could be encouraged to return to the classroom. (Alternatively, if ghost teachers leave the teaching force, it might actually increase the apparent teacher shortfall, since the annual turnover of teachers—now estimated at 20 percent —would represent a higher percent if computed only over the active teachers.)

3.3.2 Quality and motivation

The quality of teaching staff is weakened by recruitment of academically weak students to teaching, poor teacher training, and poor teacher motivation.

a. Recruitment

Often, students opt to receive teacher training not because they have a particular interest in or commitment to teaching, but because they are academically weaker and that is the only alternative they have if they want to continue studying. Pre-school teacher training is an educational option pursued by those who do not have a junior secondary school completers' examination score that would allow them into a better senior secondary option. Primary teacher training is an option generally pursued only by junior secondary school graduates who do not qualify for either the academic senior secondary tracks (VWO and HAVO) or technical courses of study (NATIN).

b. Teacher training

Training for pre-school and primary teaching is provided through a four-year program at three Teacher Training Colleges (TTC), all of which are located in Paramaribo. There is a part-time program in Nickerie in which students study in Nickerie four days a week and take courses at TTCs on the weekends. Training for junior secondary teaching is provided by the Advanced Teacher Training College. Vocational and technical teachers receive their training at a special Training College for Vocational Teacher Training.

The first two years of the TTC curriculum concentrate on improving students' knowledge of content in their area of specialization. Students take courses in 11 subject areas each year. In year three, students are introduced to pedagogical techniques. During that year, they attend class at the TTC four days a week and practice teaching in a school one day a week. The entire fourth year is spent practice teaching at a nearby school. TTC faculty are responsible for supervision of practice teachers, however they do not receive sufficient reimbursement to cover their costs of travel to the

schools for supervision visits. There are differing opinions about the extent to which TTC students have an opportunity to familiarize themselves with the curriculum or instructional materials that are actually used in the primary schools, though presumably they encounter it during their practice teaching.

As noted above, students enrolling in the TTC tend to be less academically able and come to the TTC because they do not have test scores that allow them a better option. School officials estimate that less than one percent express any interest in teaching as a career. While about 300 enter each year, only about 50 complete the four year TTC program (see Annex Table A-22). School officials have no role in the assignment of students after graduation.

Moreover, morale among TTC teachers is low, partly because they work with the least able students who exhibit little if any interest in their studies. Teachers have few instructional resources with which to work. They even have to purchase their own reference books as the schools do not have a reference library for instructors. Facilities of the three TTCs need repair and upgrading. The buildings have water problems, broken toilets, poor athletic facilities, and cannot be adequately secured against theft. School officials report that many instructors hold second jobs. Instructors in the TTC are (usually) graduates of the Advanced Teacher Training College. Instructors at the Advanced Teacher Training College are graduates of that institution, graduates of the University of Suriname, or were trained abroad.

The Training College for Vocational Teacher Training faces the same problems experienced by the other teacher training colleges -- lack of funds, lack of tools and equipment with which to learn and practice one's trade. Consequently, it is highly probable that teachers' own preparation to be a VTT instructor is weak.

Recruiting and retaining teachers in technical areas poses a particular challenge because, if they are good at their trade, their skills demand a considerably higher salary in the private sector. Consequently, those who continue to teach tend to be older instructors who do not wish to compete in the private sector, or younger teachers who have second jobs in which they use their specialized skills to supplement their income.

c. Qualifications

Notwithstanding the problems associated with teacher training programs listed above, passage through the teacher training colleges does impart some preparation for teaching. One problem with the education sector is that a large number of primary school teachers do not have the minimum recommended teacher training qualifications. To be considered qualified to teach in primary school, a person must attend a four year training program at one of three teacher training colleges. In 1991-92, about 67 percent of primary teachers met this qualification (see Annex Table A-7). The remaining 33 percent were hired without adequate teacher preparation. Opportunities for in-service upgrading of unqualified teachers are limited. A bureau within the MOECD is responsible for offering in-service teacher training and it has organized some in-service training programs in conjunction with the Advanced Teacher Training College, but on a rather *ad hoc* basis.

The situation at the junior secondary level is probably somewhat better. To teach at the junior secondary level, a teacher is supposed to have graduated from the Advanced Teacher Training College. Data on the proportion of teachers who are considered qualified are not available. However, senior MOECD officials estimate that about 20 percent of the teaching force leave teaching each year — about 162 teachers just from the general junior secondary track alone. Output from the Advanced Teacher Training College in 1991-92 was about 459. If this output has been maintained and if even half of those graduating enter teaching, the production of trained teachers should be able to meet demand at the junior secondary level.

d. Teacher morale

Teacher morale has been negatively affected by declining salaries in real terms, poor remuneration relative to other professions, inadequate preparation for teaching, poor facilities and a lack of materials. Between 1980 and 1994, teachers salaries declined by four-fifths in real terms, thereby contributing to an outflow of qualified teachers who could get jobs abroad. Although the real declines in teachers' salaries over that period was in line with economy-wide declines in wages and salaries, teachers had much less ability to absorb the decline because they started out from a lower base. As real salaries declined, therefore, economic necessity obliged some teachers to shift to jobs in other economic activities, which were much better remunerated (see Table 3). ³ This was manifested by formal shifts from education to other activities, informal shifts through an increase in ghost-workers, and a deterrent to potential teachers.

TABLE 3 Average Salaries in Different Economic Activities in 1995 (US\$)	
Mining and quarrying	20803
Transport, storage and communication	12990
Banking	7250
Trade, restaurants and hotels	4925
Economy average 1/	3183
Insurance	2421
Manufacturing	2139
Utilities	1801
Government (including education sector) 2/	1011
Community and personal services	585
Source: GBS and IDB. 1/ Does not include agriculture. 2/ Teachers receive from 0-25 percent more than other government employee	es.

It should be noted that teachers are, on average, slightly better remunerated than other government employees and they receive 0-25 percent higher salaries than other government employees of equivalent grade.

Inadequate preparation -- of the teachers without teaching qualifications and those that pass through TTCs -- further contributes to teacher demoralization, as do the poor state of teaching facilities and the acute shortage of teaching materials and supplies. School officials report that teacher morale is especially low among technical and vocational schools, in part due to the lack of student interest in the content of instruction and in part due to the lack of the equipment and materials that would allow students to practice their skills. They point out that technical and vocational students are among the least capable and justify the high dropout and repetition rates in terms of low student quality and interest.

3.4 Instructional materials

At present, schools are desperately short of texts and instructional materials, and do not have sufficient furniture, textbooks, or other instructional materials to support quality teaching. The MOECD has been unable to provide an adequate supply of even the most basic instructional aids, such as pencils and paper. This is primarily due to a shortage of funding for instructional materials, but is also due to problems with the distribution system. Schools' inability to secure the materials from theft once they are delivered to the schools compounds the shortages.

All of the vocational and technical schools face a particularly difficult instructional problem caused by the shortage of materials and supplies. Schools are unable to provide sufficient raw materials — lumber, sheet metal, chemicals, tools, computers — for students to use in practising their vocational trades. Specialized equipment is mostly broken and unrepaired. This lowers the quality of student preparation and reduces students' utility to employers.

3.4.1 Funding

Although government funding for the education sector -- at 5 percent of GDP -- has been adequate, few of the resources have been allocated to instructional materials. As Table 3, shows, 88.5 percent of the education budget is spent on personnel expenses (salaries of MOECD employees including teachers, religious school teachers and administrators, and pension fund contributions). As a result, few resources are available for other items such as school and office supplies and equipment and maintenance. Less than 4 percent of the education budget is spent on supplies.

TABLE 4 Annual Budget of the Directorate of Education, MOECD (percent of tot	al)		
	1993	1994	1995	1996
Recurrent expenditures	99.2	97.3	97.9	99.1
Personnel	42.2	49.8	46.3	48.3
Subsidies to religious schools (teachers administrators)	38.4	31.6	36.8	37.8
Other personnel expenditures (teacher insurance, pension fund contributions)	1.3	2.4	2.8	2.4
Utilities	5.7	2.7	2.1	1.7
Transportation	5.8	6.0	5.0	4.4
General operation	0.2	0.1	0.1	0.0
Supplies	4.2	2.2	3.9	3.6
Maintenance and repairs	1.0	2.3	0.6	0.6
Accommodation for residential students	0.2	0.2	0.2	0.4
Capital expenditures	0.8	2.7	2.1	0.9
TOTAL	100.0	100.0	100.0	100.0
Source: Annex Table A-34.				

3.4.2 Distribution

The system for distributing textbooks and educational supplies from the central ministry to the schools is widely regarded as having broken down. Headmasters and teachers almost universally complain that they do not have the necessary materials to do their job. Even the distribution of materials and supplies to schools in Paramaribo is weak. A frequently cited reason for the distribution problem is lack of money to pay for transportation. While this may be a contributing factor, it does not appear to be the major reason for the breakdown. More money will not necessarily solve the problem.

Currently, school furniture and educational materials cannot be delivered to the schools until schools open in October for fear that these materials would be stolen from the schools. Schools do not have secure warehouse or storage facilities and the school buildings themselves cannot be secured against theft, which is widespread. Once school begins, the MOECD department responsible for distribution gives top priority to delivering chairs to all schools. They then give priority to national distribution of tables. Only when the furniture has been delivered is priority given to the distribution of textbooks and instructional supplies. Consequently, instructional supplies, when they are provided, do not arrive until many weeks after school begins.

A contributing factor is the procedures used for ordering furniture and instructional materials. Schools are required only to submit their orders for furniture and supplies in June. Since some schools are late submitting this information, the consolidated order does not go to the vendors until

September, for a school year starting in October. Since the growth in enrollments has been relatively stable — and hence predictable — over the last few years, it should be possible to order materials and supplies ahead of time and have them distributed to schools before school begins. At present, however, there is a problem of warehousing. One could argue that the cost of providing warehouse facilities is more than offset by the value added by having instructional materials in the schools on time.

The Distribution Department has a computer system that allows it to track orders and plan deliveries. However, senior officials in the Department cite the need for more staff training. The Department lacks skilled personnel capable of developing and implementing a national distribution plan. It also lacks vehicles (only one of its two trucks is operational currently), though it rents extra trucks during peak delivery times. The issue of whether there are sufficient amounts of instructional materials available to be delivered is viewed as the responsibility of other Ministry departments.

3.4.3 Curriculum and materials

Until the mid-1980s, primary school instructional materials consisted mainly of Dutch textbooks brought from the Netherlands. This posed some problem for students, as they were unfamiliar with some of the terminology (such as snow) or to Dutch popular culture, such as the use of "ugly duckling" as a nickname for a particular automobile model produced by *Citroen*. In 1986, as part of an IDB project, new curricular materials were developed with special attention to Surinamese culture and with more emphasis on active student participation. Textbooks were replaced with workbooks in which students wrote their answers. Although employing a better pedagogical approach, these materials introduced a new problem. While the old textbooks had been reusable, the new materials had to be replaced each year since students wrote in them. Moreover, the workbooks had soft-covers and were not durable. When the government was unable to assume the recurrent cost for producing and distributing the new materials, subsequent students had no texts or instructional materials. To compensate, teachers presented the materials by writing the lessons from the student workbooks on the blackboard.

The problem was exacerbated when the IDB project was terminated early due to difficulties encountered in other parts of the project (discussed later). While originally intended as a new curriculum for all six years, only materials for the first three years were completed in some of the subjects at the point at which the project was terminated. As a result, students switch pedagogical approaches in the middle of their primary schooling.

3.5 Facilities

As with instructional materials, the funding allocation to educational facilities is meager. From 1993-96, maintenance and repair expenditures received less than 2 percent of the education budget. As a consequence, educational facilities are in poor condition.

In 1994, there were 273 primary schools and 103 junior secondary schools throughout the country, most of which were in and around Paramaribo. Existing facilities are generally in poor repair, many without water, working toilets, or blackboards. There are only six senior secondary schools, five located in Paramaribo and one in Nickerie. Senior secondary school facilities are in relatively better condition than primary and junior secondary schools, but they are still in need of repair and refurbishing. School officials are not able to secure the schools and report that theft has resulted in the loss of much of the scientific and sports equipment and other school supplies. Vocational and technical school facilities are in very poor repair and are poorly furnished, reflecting the lower prestige assigned to vocational and technical education generally. The facilities at the tertiary level are in relatively better condition than those at lower levels of the education system, reflecting the fact that much of the international assistance to education has been directed at higher education.

The Director of Technical Services in the MOECD estimates that 60 percent of the government schools need repair. School repair is the responsibility of the Department of Technical Services of the MOECD and repair teams are dispatched from Paramaribo when a District Inspector reports the need for their services. Department of Technical Services staff appear to have the technical skills to make the needed repairs, but lack the funds to purchase the necessary materials. MOECD officials point out that one major repair may require a quarter of the annual materials budget for the Technical Services Department.

There is little history of community participation in maintaining government school facilities, though this occurs occasionally. The new Director of the Technical Services Department has been encouraging community participation by purchasing paint and supplies for communities that are willing to contribute labor. There is, however, some community participation in maintaining religious school facilities.

The government has assigned a priority to constructing new schools, but hopes to achieve that through international assistance. Progress on schools currently under construction is slow and only limited new school construction is funded within the government budget (capital expenditures accounted for only 0.8-2.7 percent of the Directorate of Education's budget between 1993 and 1996).

Some new school construction is needed to replace those schools which have deteriorated beyond repair. The need for additional school construction beyond replacement, is less clear. The high school participation rate and relatively slow growth in primary enrollments over the last ten years would suggest that the annual demand for new school facilities should be minimal and manageable. Similarly, the average class size of 25 students reported in the Ministry data suggests class sizes within existing facilities are well within international standards. However, visits to schools suggest that classes are considerably larger than Ministry statistics would indicate and a real need for new construction may be masked by poor data. Last year, for the first time, about 160 students in the Paramaribo area were denied admission to a primary school because there were insufficient school places.

The need for new schools is most pronounced in Districts farther away from Paramaribo, in which participation rates are still proportionately lower than in the urban and coastal areas. In particular, most schools in the interior were badly damaged (or destroyed) during the civil war. A Dutch government program, initiated in 1987, to construct new schools in the interior has encountered several setbacks that have delayed that effort (discussed later).

Construction of new schools is the responsibility of the Ministry of Public Works (MPW). The MPW is regarded as generally unresponsive to the needs of the Ministry of Education and new construction is slow. Buildings started in 1992 still had not yet been completed in late 1996. Problems in the earlier ill-fated IDB school construction project are attributed, in large part, to misallocation of funds within MPW.

4. Performance and Efficiency of the Education Sector

Introduction

The large amount of human and financial resources devoted to the education sector was discussed in Chapter 3. This Chapter discusses the results of those inputs and analyses the performance and efficiency of the education sector. Box 2 provides definitions of terms commonly used to analyze the performance and efficiency of education systems.

Box 2

Definitions of Education Terminology

Access and equity: Access concerns the proportion of the target population reached by the education system. Equity concerns the extent to which education opportunities are made available for all segments of the population, without restriction due to factors beyond an individual's control, such as gender, socioeconomic status, and geographic location.

Internal efficiency: refers to the extent that an education system optimally allocates and uses available resources for improving the quality and increasing the quantity of education. Inefficiencies are indicated qualitatively by low student attainment, weak teacher preparation and effectiveness, inadequate or inappropriate content and presentation of curricula, and low availability and utility of instructional materials and resources. Inefficiencies are indicated quantitatively by high rates of attrition and repetition, low student to teacher ratios, and under-utilization of physical facilities.

External efficiency: refers to the extent that education and training contribute to the sustained economic and social development of the country, build knowledge and skills geared to specific employment opportunities in the economy, and are balanced in the type and quantity of output. More specifically, it refers to the relevance of the instruction that students receive. It is concerned with the extent that the education adequately prepares students for employment and/or continued schooling. Indicators of external efficiency include graduates' ability to find employment, their ability to perform well once employed, and employer satisfaction with employees preparation.

4.1 Access and equity

Generous public funding of the education sector has resulted in relatively high levels of access to education, particularly at the basic levels. In 1990, the enrollment ratio at the pre-primary level was 94 percent, which was the highest in the Latin America and Caribbean region (UNESCO). Similarly, coverage at the primary level has been nearly universal. At the secondary level the

enrollment ratio drops to 45 percent, which is on a par with Colombia, Mexico and Peru, below Jamaica and Trinidad and Tobago (65 percent) and Barbados (81 percent), and above Brazil (19 percent), Venezuela (20 percent) and Nicaragua (26 percent) (see ID B, 1996).

The principal reason for relatively high enrollment ratios is that private costs have not represented a significant constraint on access to education, because — as noted in Chapter 3 — tuition is virtually free at all levels of education. Therefore, household expenditures are limited to very modest entrance fees, a school uniform, a contribution to the child's transportation to school, and notebooks and pencils that the government has been unable to provide. The estimated annual costs to a family for sending one child to a primary school in a district outside Paramaribo is US\$26 (see Annex Table A-8). The costs to a family that has three children in primary school would be about \$77 per year. The annual cost to a family for sending a child to pre-primary school — where pupils do not wear uniforms — is US\$5.75. These expenditures compare with an annual per capita income of \$1,280.

Cost is more of a deterrent to entering Teacher Training Colleges. Students have to pay for all supplies they need to complete their practice teaching -- e.g. special paper they need for lesson plans, extra writing books, photocopies of parts of a lesson they want to use in class and glue and scissors. They are also responsible for any transportation costs associated with their practice teaching. Students from districts outside Paramaribo may stay at a government dormitory at a cost to the student of Sf2,000-3,000 per month.

Geography undoubtedly does constrain access to education. The nearly 67 percent of the population who live in and around Paramaribo have much greater access to education than children from rural areas, particularly the interior districts (see Annex Table A-30). Primary schools in the interior districts were badly damaged or destroyed during the civil war and many have not yet been repaired fully. Most junior secondary schools are in the Paramaribo area with a scattering of schools in other coastal cities. There are no junior or senior secondary schools in interior districts. Boarding facilities for children who are out of commuting range and have no urban relatives are extremely limited, leaving little opportunity for these students to continue their education.

The quality of instruction also appears to vary between the urban and interior areas. Examination scores (for all their problems) indicate that student performance on the primary school leavers examination differ across students in urban, coastal and interior areas of the country. While about 50 percent of students in the Paramaribo urban area qualify for entrance to the MULO (academic track) junior secondary option, only about 30 percent of students in the interior do so (Annex Table A-32). Such variations, however, may derive more from the lower average household incomes in the interior than from geographical differences in the quality of provision.

The education system is equitable from a gender perspective. Girls outnumber boys in primary and the academic tracks of junior and senior secondary education (see Annex Table A-1). All pre-school teachers, 88 percent of primary teachers, and about 70 percent of secondary teachers are women. (Senior secondary teacher data is not available by gender.) While male teachers outnumber female teachers in technical schools, female vocational students tend to outperform their

male counterparts, as indicated by the higher percent of girls passing at each grade level (Annex Table A-13).

4.2 Internal efficiency

4.2.1 Dropout and repetition

Student dropout and repetition are extremely high in Suriname. While about 9 out of every 10 Surinamese children start school, less than four in a thousand will finish senior secondary school 12 years later. Until 1992, dropout at the primary school level averaged about 4 percent each year for grades 1-5, and then increased sharply for grade 6, presumably reflecting parents' judgements about the low probability of their child passing the primary school leavers examination administered at the end of grade 6 (Annex Table A-5). More recently (1992-1993) there has been a sharp increase in student dropout during and after grade 1. Nearly one in five students who started first grade did not return for second grade.

Most students who do not pass to the next grade do not dropout, they repeat the grade, often doing this several times in the course of attending primary school. Over the last ten years, about a quarter of the students at every grade level (1-6) repeat that grade the following year. A cohort analysis, tracking the same group of students from 1988-1994, indicates that, of 10,275 students in the sample who started grade 1 in 1988, 7.27 percent completed six grades in six years. Another 12.4 percent completed in seven years; 12.7 percent completed in eight years; 9.8 percent completed in nine years; and 5.6 percent completed in ten years of schooling (Annex Tables 5a and 5b). Overall, only about 48 percent of those who started ever received a primary school completers' certificate.

The MOECD has some special programs for addressing the needs of those students who never enter or drop out of primary school, but they are relatively small in scale and cannot keep up with demand.

Data on student enrollment by grade and data on student progression, repetition, and dropout are not available for junior secondary schools. Anecdotal information from individuals familiar with the national education data suggest that 22 percent - 28 percent repeat each grade and that perhaps another 17 percent dropout each year. These estimates are consistent with repetition and dropout rates for the primary and senior secondary levels. At the senior secondary level, dropout and repetition rates are high in all three tracks. In 1991, one in every three students in the 13 year (top academic) track dropped out after the first year; another one in every four students had to repeat the grade (Annex Tables 11a).

The high rates of repetition and dropout indicate high rates of wastage and low internal efficiency. Student dropout means that the government pays for many years of schooling that do not result in graduates with employable skills. Repetition means that the government has to pay for extra years of education for many students. As a consequence of dropout and repetition, the government

must invest 15 years of primary schooling for every student who completes the six grades of primary schooling. This compares with 6.7 years in Panama, 7.5 years in Venezuela, nearly 9 years in Peru and 11 years in Nicaragua (IDB, 1996).

4.2.2 Examination system

Examinations at the end of each cycle of schooling are used to ration educational opportunity. While procedures for developing these national tests follow well established professional guidelines, they are ultimately administered and scored in a way that undermines their validity and usefulness.

National tests are administered at the ends of the primary cycle (grade 6), the junior secondary cycle (grade 10), and the senior secondary cycle (grade 12 or 13, depending on course of study). Each of these examinations has two purposes: (a) to determine eligibility for a school completers' certificate for that cycle; and (b) to determine a student's eligibility and placement in the educational options at the next cycle.

Primary school completers are directed into subsequent educational options through a combination of their end-of-cycle test score and their age. If students below the age of 13 receive low scores, they may have the option of repeating grade 6. If they are over the age of 14, they have exhausted their eligibility for primary school and must either take a lesser vocational junior secondary option or drop out of school. The examination given at the end of the junior secondary cycle is used to determine eligibility for a junior secondary school completers' certificate and is re-scored to yield a second score that is used to place the student into one of the senior secondary options (see Annex Table A-28).

Prior to 1984, these end-of-cycle examinations involved only a test prepared by the Examinations Bureau of the Ministry of Education. However in 1994, responding to a public outcry about low examination passing rates, the Minister of Education changed the procedures to allow each school to prepare its own end-of-cycle test. The results of these school tests are then combined with the national test results in the determination of both eligibility for a completers' certificate and placement into the next cycle. In combining the school and national test scores at the primary level, the school test is worth one-third and the national test is worth two-thirds of the final combined score. At the end of junior secondary, the school and national tests are given equal weight. This procedure has three consequences:

- Examination pass rates cannot meaningfully be compared across schools or districts, since school tests differ in content coverage, reliability, and difficulty.
- Local schools are able to influence their pass rates to respond to community pressures (which was the original intent of the Minister's policy change).
- The Ministry has no effective way to monitor the instructional impact of new initiatives to improve the quality of education.

Ironically, the introduction of the new procedure did not raise primary student pass rates during its first year of application, 1994. Indeed, examination pass rates for primary students actually dropped because student performance declined faster than the reduction in standards. In the context of galloping inflation that year, schools suffered an acute shortage of instructional materials and supplies, and a series of teacher strikes reduced the amount of instructional time.

However, the new procedure did start to raise pass rates in 1995. A comparison of pass rates including the school exam with those when not including the school exam (Annex Tables 25 and 26) indicates that including the school examination data in the final score raises the pass rate — rather dramatically in some districts (e.g. Sipaliwini). The tendency for school tests to increase the overall pass rate also holds for the junior secondary school completers' exam (see Annex Table A-27).

The *national* end-of-cycle tests appear to follow well-established professional procedures for test development and administration. Test items are prepared by committees of teachers, test experts, and community representatives. A second committee, composed of educators and test experts then reviews the tests for alignment of the test to the national curriculum (to the extent possible, given the variability in implementing the curriculum across schools). Each test in each school is administered under the supervision of an independent test monitor. These test monitors are teachers from other schools, retired teachers, and government officials who are paid for their time and help ensure that proper test administration procedures are followed. Scoring of the primary school and junior secondary completers' examinations are done by the Examination Bureau of the Ministry of Education. However, scoring of the Senior Secondary Leavers' Examination is scored at the school by the teachers and the examination monitors, and the results of the school and national examinations are reported to the Examination Bureau.

While the present test administration system is expensive to operate, it would be worth that investment if the test results accurately and fairly allocated children to different education options and yielded useful information about the impact of interventions to improve educational quality. However, as long as the national tests results are combined with school-built test results in reaching a final student score, the investment in elaborate test administration procedures is largely wasted.

The present testing system is also over-reliant on a single test at the end of a four or six year school cycle as the basis for allocating students to future educational options. International practice generally favors a continuous assessment approach, in which the allocation of students to future educational options is based on more information, collected over a longer period of time and which makes some provision for including students' personal interests and aptitudes in the decision.

This notwithstanding, at present most grade repetition occurs during the years in-between national testing cycles and testing within grade cycles appears more flawed than between cycle

An exception is the District of Nickerie where marginally fewer students were eligible for the academic junior secondary track (MULO) with the combined score than with only the national score.

Only one committee is involved in preparing and reviewing the Senior Secondary Completers' Examination.

testing. Grade-to-grade promotion is based on tests constructed by teachers. Student progress, based on these tests, is then supposed to be reported three times a year to the MOECD. Teachers get little if any training in test development and there is no comparability in tests from school to school. In practice, teachers probably end up evaluating pupils based on their overall judgement of that student's ability. The consistency of repetition rates over years and across grades suggests a widespread informal expectation among teachers about how many students should be allowed to pass.

International comparisons of educational attainment are hampered by linguistic isolation. Suriname does not participate in the Caribbean Examination Council and thus does not administer the examination that would allow a comparison of student achievement with other Caribbean countries. MOECD officials point out that the Caribbean Examinations, while honoured by institutions in the Caribbean region, do not have wide currency in Europe, where most Surinamese students who wish to study abroad prefer to go.

4.3 External efficiency

4.3.1 Skills availability and employability

Widespread skills shortages suggest that the education system is not producing an adequate supply of qualified employees.⁶ The skills shortage is particularly acute in the civil service (including the Ministry of Education), where only 1,200 persons (700 if teachers are excluded) out of a total of 34,000 employees had some degree of higher level education. A 1996 study of higher level (professional) skill shortages within the government, conducted by the Organization of American States (OAS) and the National Planning Office (NPO) estimated that, based on the existing structure and functions of government, the executive levels of government needed 230 additional persons with a bachelor's degree and 220 additional persons with a master's degree (see Annex Table A-24a).

It is harder to assess definitively skills shortages in the private sector because of a lack of data.⁷ However, anecdotal evidence suggests that, while skills shortages are not as acute as in the public sector, primarily because the private sector pays considerably more attractive salaries, skills shortages are still pervasive. A case study of Suralco, which is the country's largest private sector

While deficiencies in the education system are mainly responsible for the skills shortage, part of the skills shortage is attributable to the emigration of many highly-skilled persons after 1974.

National employment data tend to be old and of uncertain quality. Much of the workforce needs data in the 1996 Employment Report of the Ministry of Labor were collected in 1992, prior to an acceleration of inflation and large exchange rate adjustments. The 1992 data do not reflect current development plans or vacancies of major employers. In 1996, the Ministry of Labor sought Dutch assistance to conduct a labor demand study, but this request was not viewed as a priority by other units of government and the item was not included in the agenda of the November 1996 bilateral meeting between Suriname and The Netherlands.

employer and which is generally considered to have access to the best graduates, illustrates this point and questions the relevance and quality of the vocational education students receive.

The total workforce of Suralco is presently about 2,200, but the company expects to reduce its workforce over the next four to eight years. Suralco hires about 135 new employees each year and about half of those come directly out of school without previous employment experience. The experience of the company so far is that graduates of junior and senior secondary schools are weak in English and mathematics, and are weak in the general knowledge necessary for the acquisition of advanced skills. Those hired for technical jobs (virtually all who enter without prior employment experience) go through a two year apprenticeship program designed and run by the company (which includes a year of additional mathematics instruction). Of the 24 junior secondary vocational graduates accepted into the Suralco apprenticeship program, 16 were able to complete the course. Suralco has fared better with NATIN graduates -- all but one of 24 apprentice trainees finished the course.

Company officials point out that Suralco is an American company and employees need to be able to converse in English with American staff and be able to read English instruction and repair manuals that accompany the equipment. Further, much of the technical equipment in the mining and refining processes are computer controlled. While the company expects to provide this specialized computer training, the company training requires stronger literacy and numeracy skills than graduates of technical track programs tend to have. Company officials have had better success in hiring graduates from the academic tracks and training them in technical skills than in hiring technical graduates and teaching them basic literacy and numeracy skills.

Company officials observe that graduates of vocational and technical programs are unfamiliar with much of the technology used in the production process (e.g. fuel injection systems, valves, pumps) and many of the tools used to maintain that equipment. A more general problem is that graduates from technical schools are trained rather narrowly in single technical areas (e.g. carpentry and metal work). Suralco requires that employees have cross-skill training and operate in a multitasking work environment. For example, all electricians receive training in instrument mechanics and all instrument mechanics receive electrical training. Mobile equipment operators are expected to maintain and repair, as well as operate, their equipment.

Other major employers, such as Staatsolie, the state-owned oil company, report similar experiences and are uniform in urging stronger school preparation in basic skills, more multi-skill training, and more attention to aligning the school-based training to the skill needs of local companies.

Suralco and other major international employers observe that the relevant technology associated with their production processes is changing every 2-3 years. It is unlikely that vocational and technical training schools can (or should) support the investment in specialized equipment that would allow them to train their graduates in specific fields.

4.3.2 Quality of education

While low quality instruction undercuts internal efficiency, it also undermines the external efficiency of education as graduates do not have the skills necessary to find and hold meaningful employment. As discussed earlier, academic track students often lack textbooks and instructional materials; vocational and technical students do not have the materials and tools with which to develop and practice their skills; and the average quality of teaching is low. The combination of these factors limits the skills of new entrants to labor market.

4.3.3 Commitment to professional track

Much educational and training effort does not lead to increased output because many students in vocational and professional training have no particular interest in their subsequent studies or in pursuing careers in the areas for which they are being trained. Students' post-primary education options, and again their post-junior-secondary options are determined largely by their score on national examinations given at the end of each education cycle that presumably measure students mastery of previous content. Individual interests and aptitudes are not considered in the assignment of individuals to subsequent educational options.

This problem is particularly acute in the teaching profession itself. Teacher training school officials estimate that less than one percent of incoming students have any interest in teaching as a career. About half of each cohort do not enter teaching after graduation. While TTC training may contribute to national development as leavers utilize their skills in other areas of the economy, much of the government's investment in teacher training does not return to benefit education and teacher training is an inefficient way to raise general skills levels in the economy.

4.3.4 The prestige of vocational and technical education

The test-driven selection process that tracks the least academically able students into vocational and technical options devalues vocational and technical skills and stigmatizes students who pursue training in these areas. This caste system undermines national development, as students seek to avoid the very skill areas essential to the development of a robust economy.

Tracer studies of recent graduates that could clarify the employment options available to graduates have not been conducted. Anecdotal evidence indicates that actual unemployment of school graduates, at least at the junior and senior secondary levels, is low because those not employed in formal positions generally earn an adequate living by piecing together a series of part-term activities.

5. Government Strategy and International Support in the Education Sector

5.1 Government's strategy

A new government took office in October 1996 and, given the unavoidable period of policy review and development that occurs with every change of government, is in the process of formulating a full plan for education development. A committee has been appointed to review the education portion of the national multi-year development plan (1993-98) and prepare a new plan.

Articulation of the government's plans for education has also been hampered by a recent cabinet reshuffle. In public remarks, the former Minister of Education and Development indicted that more attention would be given to primary education and that higher education institutions needed to explore new ways of cost-sharing and cost recovery. The Ministry is already exploring a student loan system to help offset increased costs to students from such an initiative. (The student association at the university has already indicated its opposition to increased student costs.). Given the short time in office, the new Minister has not yet articulated definitive views on the direction of education policy.

5.2 International support

The major international donors to education in Suriname are the Netherlands and Belgium. Several other countries and international organizations, including India, China, Brazil, Japan, and UNDP provide scholarships for advanced study abroad (see Annex Table A-37 for a summary of international project assistance). Coordination of donor assistance within Suriname is assisted by a monthly lunch meeting of international assistance representatives with senior officials of the Ministry of Planning and Development Cooperation.

The major focus of Dutch support has been instructional materials and supplies at the primary level — particularly in the interior, the development of apprenticeship programs in vocational/technical education, and support for higher education, both for strengthening the University of Suriname and for scholarships for students to study abroad (Annex Table A-38).

The largest primary education project financed by the Dutch government encountered a series of difficulties related to the purchase and distribution of materials. ⁹ Instructional materials purchased from Holland arrived in the country late, the distribution network was a continuing problem, and theft of materials once they arrived in the schools was frequent. As a consequence, the purchase and

⁹ A report evaluating the primary school project was due in late November 1996.

distribution of school supplies was stopped in the early 1990s. The repair of schools in the interior was re-started by working through a Surinamese NGO (rather than through the government).

Belgian assistance has been in the form of Belgian advisors to the MOECD and university scholarship programs. There are also several direct university-to-university collaborative projects between Belgian universities and the University of Suriname. Most of the Belgian scholarships are for Surinamese students to study in universities in the Latin American region. Previous experience with scholarships to Dutch universities indicated that many students did not return to Suriname at the end of their studies. The provision of scholarships to Latin American universities was an effort to increase that return rate, a strategy that appears to be working.

The EU does not have an active program in the education sector and does not anticipate increasing its activities in that area, in part because a member country, the Netherlands, is already heavily involved in the sector.

Assistance from the IDB itself, has hitherto been limited to a primary education project initiated in 1987, and which was referred to in Chapter 3. That project provided for: (a) the development of curriculum and improvement of instructional materials in order to encourage more active student participation and make the content and examples more relevant to Surinamese students; (b) the provision of instructional materials; (c) the production and distribution of instructional materials and supplies; and (d) school construction. While the curriculum development portion of the project appears to have had some success, problems were encountered in local oversight and follow-through in the school construction component. As a result, the IDB project was suspended in 1993, when it was half-completed.

Over the last 15 years, increasing awareness of the high rates of private and social return for primary education have led many international development organizations to give priority to investing in primary education. In Suriname, however, much of the international assistance to education has been at the tertiary level, in the form of assistance to the University of Suriname and scholarship programs to support Surinamese students studying abroad. Only the Dutch government and a previous project of the IDB have given substantial assistance to primary and secondary education.

6. Conclusions and Evaluation

6.1 Strengths of the education sector

In conclusion, Suriname's education sector has some notable strengths. Education is widely available, particularly at the basic levels, and there is little evidence of financial or income constraints to access. Moreover, the system has achieved a high degree of gender equality.

6.2 Weaknesses of the education sector

But these strengths must be measured against the weaknesses of the system. The number of well qualified graduates produced by the education system is low. This under-achievement is linked to extremely high drop out and repetition rates, poor quality instruction, lack of education materials and deteriorated school buildings. Among the students who do graduate, some, particularly those with technical-vocational training, have skills that are only marginally useful to employers. The system, therefore, poorly equips students with skills with which they can earn a living. Nor does the system provide employers with a skilled, highly productive workforce.

6.3 Immediate causes of weaknesses

These deficiencies exist despite the generous amount of financial and human resources devoted to the education sector. Public expenditure on education is equivalent to 5 percent of GDP and 12 percent of total government expenditures. Total direct and indirect employment by the MOECD accounts for 30 percent of total government employment and 12.5 percent of the country's workforce. The contradiction between resource inputs and outcomes stems from three immediate problems: misallocation of resources; inefficiencies and waste; and weak teaching capacity.

Resources are not allocated efficiently between different inputs. Too high a proportion of total financial resources are devoted to salaries, leaving insufficient funding for complementary inputs like supplies, equipment and school maintenance. Chronic and severe shortages of these complementary inputs diminish the effectiveness of teachers. Moreover, the heavy spending on salaries is not, in practice, reflected in low pupil to teacher ratios because of the existence of a sizeable non-instructional staff and the absenteeism among teachers. Approximately 65 percent of the financial resources allocated to salaries is spent on non-instructional staff and ghost teachers.

The education sector is internally and externally inefficient. High drop out and repetition rates raise unit costs significantly: the government must pay for 15 years of primary schooling for every student who completes the six grades of primary schooling. Some training is ineffectual and

generates very few benefits either for the student or for the economy. Only half of the students trained at advanced teacher training colleges actually become teachers. The usefulness of technical-vocational training appears extremely limited. And despite generating less benefits than general education it costs more per pupil.

Despite spending around 4.5 percent of GDP on teachers, teaching capacity is weak. A large chunk of that expenditure has no impact on teaching capacity because it finances ghost teachers. Moreover, many of the teachers who do attend work are under qualified. A perverse selection mechanism means that teachers are recruited from the academically weakest students and many lack any interest in teaching. In addition, teacher training is weak because teacher training colleges suffer, perhaps even more severely than schools, from facility, supply and teacher deficiencies.

6.4 Fundamental causes of weaknesses

The above problems, while particularly acute in Suriname, are present in many Latin American and Caribbean countries. 10 This is because problems with misallocation of resources, inefficiencies and waste, and weaker teacher capacity, are symptoms of more fundamental deficiencies in the institutional structure of the education sector, which are common to many countries. The effectiveness of a social system, such as education, is to a great extent determined by the roles of different actors and the rules they play by. Education policy in Suriname, in common with much of the traditional social policy in Latin America and the Caribbean, has recognized the importance of public action to improve social conditions of the population. The strategy adopted has been to give the public sector an all encompassing role — as financier, purchaser, provider, employer and regulator. Such social programs may have performed adequately when clienteles were smaller, but in many cases attempts to expand and universalize the services led to a deterioration of service delivery. As the number of clients expanded, programs became more ambitious and more complex. Under these circumstances, the combination of all these different roles in one large ministry creates a structure which lacks the appropriate mechanisms to make the system perform efficiently and equitably. Furthermore, this centralization of decisions and resources exacerbates the difficulties of monitoring performance, ensuring equity and inducing innovation in the social sectors.

For example, efficiency in the use of funds is largely determined by how the system using the funds is organized. Under Suriname's current system the budget is determined by inputs, in particular by the payroll plus some other expenses and running costs. Funding, therefore, is only very indirectly linked to output or outcomes and education providers (schools, colleges, training institutes) do not face any financial incentives to produce large quantities of high quality education services. They will receive the same amount of funding whether they produce inferior quality teaching or high quality teaching.

This section draws on the analysis in the special section of the IDB's 1996 report on Economic and Social Progress in Latin America: Making Social Services Work.

In addition, schools face little incentive to ensure that inputs (particularly staff) are used efficiently since the quantity of inputs provided by the MOECD does not vary according to the efficiency with which resources are used. Similarly, the MOECD has no financial tools to reward good provider performance or punish weak provider performance. Funding schools on the basis of the number of students attending rather than the number of teachers or number of classrooms can give decision-makers strong incentives to use their resources efficiently and provide a high quality service that will attract and retain students in their schools.

Another drawback of funding inputs rather than outputs is that financial flows respond only weakly, slowly or coincidentally with changing needs. Financing follows historical supply capacity rather than changes in demand.

A second major deficiency with the current system of funding is that it is highly centralized. Expenditure on education is almost entirely controlled by the MOECD and providers have no control or discretion over what inputs they can use. They cannot alter the resource mix and adjust, for instance, how much should be spent on teachers versus how much should be spent on supplies or school maintenance or security. They have little control over what staff skills or specializations are hired or supplied. Since school principals have immediate contact with students, teachers and the infrastructural environment, they often have a better understanding of which expenditures are going to be more effective. The weak communications infrastructure in the education sector and scarcity of formal contact between the MOECD and schools also hamper the transmission of information to the central level, where decisions regarding the allocation of resources are taken. Centralization of funding, therefore, separates those in control of allocating resources from those who have the most information about needs. In addition, the lack of school officials ability to alter their own environment can contribute to poor morale.

Since teachers are paid centrally by the MOECD, school officials have little power to discipline or reward teachers. In particular, they have little ability to penalize non-attendance by deducting absences from teachers salaries or dismissing chronically poor performers.

The existing institutional structure also diminishes and disperses accountability for performance in the education sector. Since parents and local communities have no say over how individual schools are run or to force improvements, school principals and officials are not accountable to their major clients for the services they are providing. While reporting to the MOECD, the accountability of schools to the MOECD is also reduced because both parties know that the schools have little ability to change their performance. The practice of combining national exam marks with school examination marks also clouds objective evaluation and comparison of individual school performance in turning out qualified graduates.

In addition to reducing the ability of providers to perform efficiently, the institutional concentration of responsibilities on the MOECD (financier, purchaser, employer, regulator, and manager of the providers) also hampers the MOECD's ability to carry out certain tasks. Generally, the imperatives of day-to-day management of the provision of education take precedence over other tasks such as strategic planning, regulation and monitoring and the setting of standards. The collapse he Ministry's ability to collect and compile national education statistics is an example of this crowding out effect.

7. Recommendations

7.1 General considerations

Suriname's education sector is facing severe challenges, which need to be addressed if better progress in human capital accumulation and economic development are to be achieved. The preceding chapters have argued that these challenges are not the result of a shortage of resources allocated to the sector. Rather they are, at root, caused by the current institutional and incentive structure in the education sector.

Simply increasing the level of resources allocated to the sector, therefore, will result in little improvement in the functioning of the education system or in the number and quality of graduates from the education system. A larger number of resources would be misallocated and used inefficiently. Merely increasing salaries for teachers also is unlikely to have a major positive impact on education sector performance. Experience in developing countries suggests that increasing salaries for teachers had a positive impact on educational output in only 29 percent of cases (IDB, 1993).

Moreover, even if increasing the level of resources would secure improvements in the education sector, the weak fiscal situation and competition from alternative uses would not permit significantly higher expenditures on education for the foreseeable future. Thus, the only meaningful and sustainable way to obtain a significant improvement in the education system will be to reform the fundamental institutional and incentive structure of the sector.

Because of the positive externalities generated by education and because of equity considerations, the role of the public sector in mobilizing funds for education is indisputable. However, the fact that financing is an obligation of the government does not determine either how resources are allocated or who should be responsible for directly providing the service. The choice in the method of allocation and in responsibility for the provision of the service are the keys to improving the institutional and incentive environment. Improvement, thus, boils down to giving schools the means to improve performance, giving them incentives to improve performance and holding them accountable for it.

7.2 Recommendations

7.2.1 Let providers define inputs

The first major institutional change would be to decentralize budgeting and let providers have discretion and control over the inputs they use. The unit that is most appropriate for constructing decentralized budgeting may be administrative districts, school districts or individual schools.

Channelling funds to individual schools would provide the strongest incentives for better allocation and utilization of resources but economies of scale considerations may make a more aggregated unit the most efficient option.

The degree of decentralization could also vary, ranging in a spectrum from total centralization, as is the case now, to decentralizing 100 percent of school costs. Transferring a budget equivalent to 100 percent of school expenditures would enable schools to have control over all of their inputs, staffing and otherwise, and a substantial degree of autonomy. A less ambitious but perhaps more feasible reform in the short term would be to transfer some resources for school supplies and maintenance to schools (the value equivalent of the present in-kind transfers). This arrangement, which has been introduced in several states of Brazil, would allow each school to determine whether it wants to repair school infrastructure, buy new blackboards or to increase security. Such an arrangement could be supplemented by increased use of non-financial incentives for staff management, such as recognition for good performance and penalties for bad performance.

7.2.2 Make resources reward outcomes

A second key institutional and incentive reform would be to allocate resources on the basis of outcomes rather inputs. By putting greater emphasis on performance as a criterion for receiving funds one can make budgets an instrument for putting pressure on public providers to be efficient. The most direct way to reward performance or outcomes is to allocate funding for schools based on the number of students attending the school. 11 Such "capitation" mechanisms can be simple or complex. In Suriname's case, the formula for allocating funds would have to take account of several factors. Schools in the interior would probably need a higher per pupil expenditure because costs per pupil would be higher. Teachers would have to be paid more to live in the interior and transportation costs for materials and supplies would be higher. Smaller schools -- typical of the interior -- which cannot benefit from economies of scale would also face higher per pupil costs. Schools located in poor neighborhoods are likely to be teaching more difficult students and that factor too would have to be incorporated in the formula. Costs per student also would vary between different levels of education, with higher education generally being more expensive than primary and secondary levels. The formula used to allocate funding, including the weighting for different factors, should have a legal basis and should be published and accessible in order to ensure transparency. A balance would have to be struck between flexibility to calibrate the weighting of various factors, especially in the initial period after introduction, and establishing a stable and predictable basis for planning.

An even more precise measure of schools' outputs is the number of students passing a standard national exam. However, it can be difficult in practice to determine the extent to which differential exam pass rates are due to schools' own efforts and teaching skills as opposed to other factors, such as average household income of the attending students. For this reason, if pass rates are used as a criterion in the formula allocating funding, they should be given a relatively low weighting.

7.2.3 Make providers accountable

There are numerous checks and balances that need to be in place before school autonomy is increased. It is necessary to ensure that in the process of reallocating responsibilities those that receive decision-making power have the right structure of governance, incentives and ownership to be held accountable for their actions. If resources are going to be transferred to schools there are three management instruments that need to be in place simultaneously: (i) a governance structure at the school level, preferably with parent and community participation; (ii) a budgeting process based on outcomes; and (iii) a standardized examination system. Such a coherent structure can ensure proper control over the transferred fund both by the beneficiaries of the education system and by the central government.

The typical governance structure at the school level would be to establish a school board which would have the strong participation of parents. Parents are the clients of the school's services and have a direct stake in the performance of the school. Other board members could comprise teachers and respected community members. For school principals and administrators to be held accountable to the school board, as well as to the MOECD, the board would need to have some influence or control over how financial resources are allocated and managed, what programs are run and careers of schools administrators. For the schools to take on the new responsibilities, the schools' administrative capacities would also have to be strengthened, possibly by transferring administrative staff.

As noted above, a budgeting process that is based on outcomes also puts pressure on schools to be efficient and attractive to students. It conditions schools to use inputs in the best possible combination and as efficiently as possible, while focusing them on service provision.

A standardized examination system would be required to monitor and evaluate school performance on a fair and objective basis and especially if the number of students graduating were to be used as a weight in the allocation formula. This would mean that the practice of combining school tests with national test results would have to be terminated

7.2.4 Try on a pilot or test basis

If the reforms recommended above seem to be too radical for broad implementation, they could be tested or introduced on a pilot basis. A small number of schools could be selected (preferably the schools themselves would volunteer to participate in the program) to undergo reforms of this type. Once success is demonstrated on a small basis and experience is gained, the reforms could be broadened to other schools.

7.2.5 Change the role of the MOECD

Changing the role of schools would allow the MOECD's role to change also. Its role would shift from a focus on the provision of education to that of overseer of the education system, strategic

planner, regulator and setter of standards. In sum, it would focus on the higher functions which only the Ministry is in a position to do and which, hitherto have been crowded out by the day-to-day management and operation of the education system. It would set standards for recruiting teachers, national examinations, infrastructure and facility codes, and the curriculum. It would begin again to compile and process statistics and to conduct research. Based on this enhanced information capacity, it would also strengthen its ability to plan strategically for the sector.

The MOECD would still control the allocation of funds to schools. However, it would exercise this control not by the provision of in-kind services as is the case now, but by determining, in collaboration with other relevant parties, the formula used to allocate actual financial resources to schools. It would adjust and calibrate the allocation formula as it gains experience with it.

In addition to the fundamental institutional reforms listed above, there are a number of more moderate reforms which could also be undertaken to improve the functioning of the education system.

7.2.6 Review recruitment procedures

The current system for allocating students into different educational options is crude and severely disadvantages the teaching profession by allocating academically weak and unmotivated students into teaching. This suggests the need for an entrance examination for teacher training colleges that is separate from the national examination. This would test not only for academic skills but also give a better picture of other skills that are relevant and important for a teaching career. It would also seek to screen out unmotivated students. Also, by raising an additional hurdle to entrance to teacher training colleges it would restore some prestige to the institutions and to teaching as a career.

7.2.7 User fees for higher level education

An additional method of increasing the seriousness of students receiving vocational and professional training would be to charge a modest fee for the course. At present, students in many vocational or professional training tracks pay no direct costs for the training and, given the limited possibility for obtaining a well-paying job, have little opportunity cost. A modest fee should not be intended to recover fully the costs of providing the service or to discourage serious students but to screen out students with very little commitment to the training.

7.2.8 Review technical-vocational education

The apparent expense per pupil and poor results from the technical-vocational tracks suggest that a thorough review of the system would be useful. It is likely that much could be gained from reducing the technical-vocational capacity and using the funds saved to increase the supply of general/academic education.

7.2.9 Allocation of expenditure by level of services

While Suriname has given priority to primary and secondary education levels, international donors have favoured supporting the tertiary level. Given the higher social rates of return on primary and secondary education, it would be useful to steer donors into increasing the proportion of their support allocated to primary and secondary levels.

7.2.10 Maintenance versus new school construction

It will also be important to focus on school maintenance and refurbishment of new buildings rather than embarking on a large program of new school construction. Limited demographic changes and slow growth in enrollments suggest that the growth in demand for school facilities will be modest and manageable. In general then, channeling expenditures on school maintenance and refurbishment would have the highest rate of return. However, new construction may be needed to replace those schools which have deteriorated beyond repair, particularly in the interior where schools were destroyed by the civil war.

7.2.11 Language considerations

Suriname's economic links are increasingly shifting towards English, Portuguese and Spanish-speaking countries. The dominance of Dutch, therefore, while facilitating connections with the Netherlands which is the principal source of external aid and which maintains strong cultural and other links with Suriname, may hamper Suriname's participation in a number of avenues, including trade relations. Given this, it may be useful to strengthen English instruction at an early age and in later grades, Portuguese or Spanish for more advanced students.

List of Persons Interviewed

- Mr. R. Adama, Assistant Permanent Secretary for Vocational Education, Ministry of Education and Community Development
- Mr. Carlo Badal, Lecturer in Statistics, University of Suriname
- Mr. R. van den Berg, Head of the Division of the Development Aid Cooperation, Embassy of the Netherlands
- Mr. H. Bhoepsingh, Chief, Training and Management, SURALCO
- Mr. Bottse, Head of the Office of Guidance, Ministry of Education and Community Development
- Mr. T. Dudermel, Secondary Secretary, European Commission Delegation
- Mr. Essed, Head Human Resources Manager, State Oil Company of Suriname
- Mr. T. Gobardhan, Minister of Education and Community Development
- Mr. Goedschalk, former Head of Budget, Ministry of Education and Community Development
- Mrs. De Haas-Bledoeg, Planning Office, Ministry of Labor
- Mr. G. Hollingsworth, Head of Distribution, Ministry of Education and Community Development
- Mr. A. Kallan, Assistant Permanent Secretary for Development Services, Directorate of Education, Ministry of Education and Community Development
- Mrs. Marie Levens, Senior Policy Advisor, Higher Education Development Scholarship and Exchange Programs, Ministry of Education and Community Development
- Ms. Lobbazoo, Division of Development Aid Cooperation, Embassy of the Netherlands
- Mr. Kenneth MacDonald, School Leader, A.M.S. Senior Secondary School
- Mr. Marica, Deputy Director, Ministry of Labor
- Mrs. M. Mohamedradja, Head, Bureau of Examination and Test Development, Ministry of Education and Community Development
- Mrs. L. Monsels, Director, National Planning Office, GOS

Mr. Oreste, Political Officer, American Embassy

Mr. H. Pinas, Assistant Permanent Secretary for Administrative Services, Ministry of Education and Community Development

Mr. K. Ramsundersingh, School Leader, S.P.I. Teacher Training College

Mr. Soetosenojo Ruben, Education Advisor, Bureau of Educational Information and Exchange Programs, Ministry of Education and Community Development

Mr. I. Sno, Director, General Bureau of Statistics, GBS

Mr. B.L. Tijin Liep Shie, Assistant Permanent Secretary for Education, Ministry of Education and Community Development

Mr. R. Wesenhagen, Assistant Permanent Secretary for Technical Services, Directorate of Education, Ministry of Education and Community Development

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Table A-1

Number of Schools, Teachers and Students, 1993/94

	Grade/Age		Student Enrollment		Numbe	Number of Teachers	ers	Number of	Number of	Number of
Type of School/Level		Male	Female	Total	Male	Female	Total	Schools	CIASSTOOMS	Classes
Pre-primary (KO)	2 years; ages 4-5	8243	7891	16134	0	602	602	220	551	549
Special Education (BO)	Grades KO-6; ages 4-11	754	375	1129	8	148	156	24	154	104
Primary	Grades 1-6; ages 6-11	36362	34634	9660L	428	3105	3533	273	3149	2487
General Jr. Second. (MULO)	Grades 7-10; ages 12-15	5357	7408	12765	248	260	808	47	614	521
Jr. Sec Vocational (LBGO) 1994	Grades 7-10; ages 12-15	3219	5221	8440	169	383	547	40	449	399
Jr. Sec Technical (LTO)	Grades 7-10; ages 12-14	2084	91	2103	166	43	209	7	144	163
Jr. Sec Elementary Vocational (LNO)	Grades 7-9; ages 12-14	0	284	284	-	32	33	2	30	25
Jr. Sec Voc. Home Econ. (EBO)	Grades 7-9; ages 12-14	1395	373	1768	26	12	38	4	42	93
Jr. SecSpecial Educ. (VBO)	Grades 7-9; ages 12-14	140	75	215	-	17	18	3	27	22
Sn. SecGeneral Academic (VWO)	Grades 11-13; ages 16-18	1106	1441	2,547				9	Total	Total
Sn. Sec General Ordinary (HAVO)	Grades 11-12; ages 16-17	451	513	964		583	•	2	count of	count of 268
Sn. Sec Teacher Training College (PA)	Grades 11-14; ages 16-19	40	933	973	T In	Total combined number of teachers	ers	3		

	Grade/Age		Student Enrollment		Numbe	Number of Teachers	ers	Number of	Number of	Number of
Type of School/Level		Male	Female	Total	Male	Female	Total	Schools	Classrooms	Classes
Sn. Sec Technical College (NATIN)	Grades 11-14; ages 16-19	999	601	675	n.a.	n.a.	n.a.	_	n.a.	n.a.
Sn. Sec Commercial College (MEAO)	Grades 11-13; ages 16-18	372	101	1073	n.a.	n.a.	n.a.		n.a,	n.a.
Higher Vocational College (HBO)	30)									
Advanced Teacher Training Institute (IOL) (part of HBO)	Grades 13-17+; ages 18-23+	442	897	1339		15 f 145 p (199	15 full time 145 part time (1996 data)	-		n.a.
Training College for Technical School Teachers (OLNO) (part of HBO)	Grades 13-16+; ages 18-22+	51	0	51			n.a.	-		n.a.
Academy of Arts (AHKCO) (part of HBO)	Grades 13-16+; ages 18-22+	n.a.	n.a.	183		8 f 25 p (199	8 full time 25 part time (1994 data)	-		n.a.
University of Suriname										
University of Suriname	Grades 14-18+; ages 18-24+	1182	1280	2462	182	99 full time 167 part time computed as 182 full time equivalent	99 full time 167 part time computed as ne equivalent			n.a.
Sources: Ministry of Education and Community Development; Central Statistics Bureau; University of Suriname.	and Community Development	; Central	Statistics Bur	eau; Univ	ersity of S	uriname.				

Table A-1

Table A-2

Number of Pre-Primary School Teachers and Pupil Enrollment by Gender and Year, 1985 to 1993

	T	eaching Sta	ff .	% of .	Stud	lent Enrolli	ment	Teacher-	
	Male	Female	Total	Teachers that are Female	Male	Female	Total	Student Ratio	
1985	1	675	676	99.9%	8727	8499	17226	1:25	
1986	1	661	662	662	99.9%	8325	8245	16570	1:25
1987	0	667	667	100%	8545	8548	17093	1:26	
1988	0	689	689	100%	9353	9096	18449	1:27	
1989	0	652	652	100%	8491	8220	16711	1:26	
1990	0	675	675	100%	8687	8281	16968	1:25	
1991	0	675	675	100%	9040	8787	17827	1:26	
1992	0	672	672	100%	9641	9079	18720	1:28	
1993	0	602	602	100%	8243	7891	16134	1:27	
1994	0	517	517	100%	7670	7306	14976	1:29	

Source: 1985-1992 data was from the Statistics Office of the Ministry of Education and Community

Development. The 1993 and 1994 data was from the General Statistics Bureau. Note that the data collection methods differ between these offices and apparent changes in trends may be due to variations in data collection methods rather than shift in school going behavior.

Table A-3

Primary School Enrollment by Grade and Year, 1984-1993

Number of Students Entering	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
1984	13742	12427	12156	12007	11433	9928
1985	13707	12209	11771	11838	10776	9819
1986	14166	12209	11834	11818	11411	10581
1987	15048	13027	12752	12915	11918	10903
1988	16246	13001	13065	12998	12117	10904
1989	16112	12954	12236	12468	11396	10060
1990	14511	13118	11971	11715	11209	10751
1991	14988	13548	12367	12103	11580	11091
1992	15678	14172	12936	12661	12114	11601
1993	15054	12994	12775	12896	11948	11539
Increase in enrollment by grade over 10 years (1984 to 1993)	9.5%	4.6%	5.1%	7.4%	4.5%	16.2%

Source: Developed from data provided by the Ministry of Education and Community Development.

Table A-4

Number of Students, Classes and Schools Under Supervision of Religious Organizations

		Student Enrollment	nrollment		Nur	Number of Classes	801	Number	Number of Schools
Religious Group	Pre- Primary Age 4	Pre- Primary Age 5	Primary	Junior Second	Pre- Primary	Primary	Jr. Sec.	Primary	Jr. Sec
Catholic	1732	1917	16341	3049	113	582	82	99	11
Moravian Evangelistic	1173	1263	14725	2982	78	480	128	99	10
Schools with the Bible	09	99	555	163	3	18	4	3	1
Hindu (Sanatan Dharm)	159	160	1438	2425	8	56	06	8	7
Hindu (Arya Dewaker)	205	201	1657	1222	11	51	55	9	7
Moslem (SMA)	69	06	713	232	5	22	10	2	-
Anglican	111	164	1367	1	8	49	•	8	
Evangelical Methodist	162	182	1263		10	35	1	4	•
Wessylian	10	12	162	9	-	9	•	-	•
Seventh Day Adventist	50	20	618	-	3	14	1	2	4
Moslem (SIS)	104	147	879	9	7	32	•	4	•
Sticht Volle Evangelie (Found. for Full Evangelism)	15	15	77	1	1	9	•	1	•
Total	3850	4266	39795	10073	248	1351	369	191	37

Source: Ministry of Education and Community Development.

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Table A-5

Primary School Enrollment, Progression, Repetition and Dropout by Grade and Year, 1984-1994*

Number of Students							0	orrespo	nding Ra	ites (%)	Corresponding Rates (%) by Grade	٥
Entering	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	1	2	3	4	\$	9
1984 Enrollment	13742	12427	12156	12007	11433	9928	100.0	100.0	100.0	100.0	100.0	100.0
Repeaters	3742	2840	2820	3101	2537	1818	27.2	22.9	23.2	25.8	22.2	18.3
Passed	2096	9153	8823	8272	7466	5889	66.69	73.7	72.6	68.9	65.3	59.3
Dropped out	393	434	513	634	1430	2221	2.9	3.5	4.2	5.3	12.5	22.4
1985 Enrollment	13707	12052	117711	11838	10776	9819	100.0	100.0	100.0	100.0	100.0	100.0
Repeaters	3894	2445	2618	3015	2504	2353	28.4	20.3	22.2	25.5	23.2	24.0
Passed	9604	9186	8720	8670	7855	5344	70.1	76.0	74.1	73.2	72.9	54.4
Dropped out	209	451	433	153	417	2122	1.5	3.7	3.7	1.3	3.9	21.6
1986 Enrollment	14166	12209	11834	11818	11411	10581	100.0	100.0	100.0	100.0	100.0	100.0
Repeaters	4062	2605	2678	3098	2741	2726	28.7	21.3	22.6	26.2	24.0	25.8
Passed	9765	935	9136	8393	8251	594	689	76.6	77.2	71.0	72.3	49.1
Dropped out	339	253	20	326	419	2661	2.4	2.1	0.2	2.8	3.7	25.1

Enrollment figures may vary from other official estimates, since these data are from a special study which only included students for whom complete data were available.

Number of Students)	orrespo	nding Ra	Corresponding Rates (%) by Grade	by Grad	اق ا
Entering	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	1	2	3	4	S	9
1987 Enrollment	15048	13027	12752	12915	11918	10903	100.0	100.0	100.0	100.0	100.0	100.0
Repeaters	3659	3262	3402	3779	3524	2652	24.3	25.0	26.7	29.3	29.6	24.3
Passed	0860	9712	9131	8539	17791	5321	65.1	74.6	71.6	1.99	65.4	48.8
Dropped out	1589	52	220	597	603	2930	10.6	0.4	1.7	4.6	5.1	26.9
1988 Enrollment	16246	13001	13065	12998	12117	10904	100.0	100.0	100.0	100.0	100.0	100.0
Repeaters	5679	3201	3353	3867	3578	3113	35.0	24.6	25.7	29.8	29.5	28.5
Passed	7266	9906	8810	8012	7117	5236	61.1	69.7	67.4	61.6	58.7	48.0
Dropped out	640	735	905	1119	1423	2555	3.9	5.7	6.9	8.6	11.7	23.4
1989 Enrollment	16112	12954	12236	12468	11396	10060	100.0	100.0	100.0	100.0	100.0	100.0
Repeaters	5371	3027	3171	3657	3384	2944	33.3	23.4	25.9	29.3	29.7	29.3
Passed	10427	9452	8779	8551	7777	4596	64.7	73.0	71.7	9:89	68.2	45.7
Dropped out	315	475	287	260	235	2521	2.0	3.7	2.3	2.1	2.1	25.1
1990 Enrollment	14511	13118	11971	11715	11209	10751	100.0	100.0	100.0	100.0	100.0	100.0
Repeaters	3282	2692	2519	2936	2658	2974	22.6	20.5	21.0	25.1	23.7	27.7
Passed	10869	9793	7206	8718	8272	5053	74.9	74.7	75.8	74.4	73.8	47.0
Dropped out	359	634	375	09	279	2724	2.5	4.8	3.0	0.5	2.5	25.3

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Number of Students						,	C	orrespo	ıding Ra	ites (%)	Corresponding Rates (%) by Grade	ė.
Entering	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	1	2	3	4	5	9
1991 Enrollment	14988	13548	12367	12103	11580	11091	100.0	100.0	100.0	100.0	100.0	100.0
Repeaters	4186	2679	2574	3026	2862	2819	27.9	19.8	20.8	25.0	24.7	25.4
Passed	10542	10216	9592	8852	8616	5257	70.3	75.4	77.6	73.1	74.4	47.4
Dropped out	260	653	201	225	102	3015	1.7	4.8	1.6	1.9	6.0	27.2
1992 Enrollment	15678	14172	12936	12661	12114	11601	100.0	100.0	100.0	100.0	100.0	100.0
Repeaters	3688	3630	2720	3069	3262	2985	23.5	25.6	21.0	24.2	26.9	25.7
Passed	10156	9942	9566	9334	8674	6093	64.8	70.2	77.0	73.7	71.6	52.5
Dropped out	1834	009	260	258	178	2523	11.7	4.2	2.0	2.0	1.5	21.7
1993 Enrollment	15054	12994	12775	12896	11948	11539	100.0	100.0	100.0	100.0	100.0	100.0
Repeaters	3059	2838	2833	2940	2612	2865	20.3	21.8	22.2	22.8	21.9	24.8
Passed	9174	9716	9736	9745	8828	6116	60.9	74.8	76.2	75.6	73.9	53.0
Dropped out	2815	440	206	211	506	2558	18.7	3.4	1.6	1.6	4.2	22.2
Increase in enrollment by grade over 10 years (1984 to 1993)	9.5%	4.6%	5.1%	7.4%	4.5%	16.2%						
Source: Statistics Office, Ministry of 1	e, Ministry of	f Education 8	Education and Community Development.	nity Develop	ment.							

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Table A-6

Number of Primary School Teachers, Pupil Enrollment and Teacher: Student Ratio (by Gender and Year, 1985 to 1993)*

Year	Te	aching Sta	lt.	% of Teachers	Stud	ent Enrolli	nent	Teacher-
	Male	Female	Total	that are Female	Male	Female	Total	Student Ratio
1985	809	2201	3010	73	36305	33658	69963	1:23
1986	394	2311	2705	85	32263	30370	62633	1:23
1987	385	2295	2680	86	32057	30214	62271	1:23
1988	499	2422	2921	83	33596	32202	65798	1:23
1989	464	2269	2733	83	30084	31351	61435	1:22
1990	428	2258	2686	84	30569	29489	60058	1:22
1991	402	2580	2982	87	37645	35762	73407	1:25
1992	472	3223	3695	87	41284	37878	79162	1:22
1993	n.a.	n.a.	n.a.	n.a.	44523	43359	87882	n.a.

Source: Statistics Office, Ministry of Education and Community Development.

^{*} Complete data for 1993 and 1994 were not available from the MOECD. Data for those years provided by the General Bureau of Statistics were not included in this table since it was collected in a different way and differs with MOECD estimates by about 18000 students for 1993 (with GBS offering a lower estimate).

Table A-7
Primary Teachers by Level of Qualification, 1991/1992

	Ma	iles	Fem	ales	To	tal .
Qualifications	Number	Percent	Number		Number	Percent
Qualified	355	61%	639	67%	994	64%
Unqualified	231	39%	318	33%	549	36%
Total	586	100%	957	100%	1543	100%

Table A-8

Estimated Costs to Family for a Child to Attend Primary and Pre-Primary School (per Child per Year)

Estimated Cost to Attend Primary School	
Item	Amount
Entrance fee (covers some books, insurance, etc.) Notebooks	500 Sf 2250 Sf
Pencils	1000 Sf
Uniforms (partly subsidized for poor students)	6000 Sf
Parents contribution to government subsidized transportation	500 Sf
TOTAL estimated parent contribution per child	10250 Sf
USD\$ equivalent @ 400 Sf = \$1	\$ 25.63
Estimated Cost to Attend Pre-Primary School	
Entrance fee (covers insurance, some materials)	500 Sf
Drawing books, pencils, other materials	1800 Sf
TOTAL estimated parent contribution per child	2300 Sf
USD\$ equivalent @ 400 Sf = \$1	\$ 5.75
Source: Academy for Educational Development	

Table A-9

Number of Students, Teachers, Classes, and Schools in General Junior Secondary School by Gender and Year, 1989/90 to 1994/95*

Student: Class Ratio	n.a.	n.a.	п.а.	25:1	21:1	24:1
Teacher: Student Ratio	1:19	1:19	n.a.	n.a.	n.a.	1:18
Number of Schools	59	57	55	55	55	55
Number 1 of 01 le Classes 1	n.a.	n.a.	n.a.	634	615	615
% Female	74.2%	69.7%	n.a.	n.a.	n.a.	%9.69
hers Total	828	854	n.a.	n.a.	n.a.	826
Number of Teachers % le Female Total Female	614	565	n.a.	n.a.	n.a.	575
Ma	214	259	n.a.	n.a.	n.a.	251
% Female	%8'55	54.6%	89.5%	\$7.9%	54.7%	59.2%
mt Total	16026	15895	15392	15890	13003	14946
Enrollme Female	8955	8687	9152	9197	7108	8842
Student Male	7071	7208	6240	6692	5885	6104
Year	1989/90	16/0661	1991/92	1992/93	1993/94	1994/95

Source: Statistics Office, Ministry of Education and Community Development.

1993 student enrollment exceeds estimates by the General Statistics Bureau (reported in Table 1) but differences do not change the policy implications of the data.

Table A-10

Number of Junior and Senior Secondary School Teachers,
Pupil Enrollment and Teacher: Student Ratio
(by Gender and Year, 1985 to 1993)

	Te	eaching Sta	ff .	% of Teachers	Stud	ent Enrollr	nent	Teacher- Student
	Male	Female	Total	that are Female	Male	Female	Total	Ratio
1985	1930	2091	4021	52%	17546	20084	37630	1:9.4
1986	1547	1759	3306	53%	16497	19381	35878	1:11
1987	1279	1563	2842	55%	15741	19210	34951	1:12
1988	1111	1426	2537	56%	15741	18507	34248	1:13.5
1989	1020	1469	2489	59%	15048	18241	33289	1:13.4
1990	943	1539	2482	62%	15768	17793	33561	1:13.5
1991	695	1801	2496	72%	16589	18946	35535	1:14
1992	987	1500	2487	60%	14017	15999	30016	1:12

Table A-11

Senior Secondary School Enrollment (VWO; 13 Year Program)

Progression, Repetition and Dropout by Grade and Year, 1989-1994

Year	Number of Students	Grade 11	Grade 12	Grade 13	Correspon	nding Rate Grade	s (%) by
	Entering				11	12	13
1989	Enrollment	1204	722	766	100.0	100.0	100.0
	Repeaters	291	128	207	24.2	17.7	27.0
	Passed	770	538	460	64.0	74.5	60.1
	Dropped out	143	56	99	11.9	7.8	12.9
1990	Enrollment	1192	898	745	100.0	100.0	100.0
	Repeaters	229	171	245	19.2	19.0	32.9
	Passed	792	608	380	66.4	67.7	51.0
	Dropped out	171	119	120	14.3	13.3	16.1
1991	Enrollment	884	963	853	100.0	100.0	100.0
	Repeaters	137	202	299	15.5	21.0	35.1
	Passed	579	640	418	65.5	66.5	49.0
	Dropped out	168	121	136	19.0	12.6	15.9
1992	Enrollment	1080	781	939	100.0	100.0	100.0
	Repeaters	226	155	320	20.9	19.8	34.1
	Passed	673	486	527	62.3	62.2	56.1
· · · · · · · · · · · · · · · · · · ·	Dropped out	181	140	92	16.8	17.9	9.8
1993	Enrollment	913	828	806	100.0	100.0	100.0
	Repeaters	143	165	283	15.7	19.9	35.1
	Passed	599	468	397	65.6	56.6	49.3
	Dropped out	171	195	126	18.7	23.6	15.6
1994	Enrollment	988	764	751	100.0	100.0	100.0
	Repeaters	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Passed	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Dropped out	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: Ministry of Education and Community Development. Enrollment figures may vary from other official estimates, since these data are from a special study which only included students for whom complete data were available.

Table A-12

Senior Secondary School Enrollment (HAVO; 12 Year Program)

Progression, Repetition and Dropout, by Grade and Year, 1984-1994

Year	Number of Students	Grade 11	Grade 12	Correspondin	
	Entering			11	12
1989	Enrollment	894	495	100.0	100.0
	Repeaters	450	225	50.3	45.4
	Passed	338	197	37.8	39.7
	Dropped out	106	73	11.8	14.7
1990	Enrollment	931	563	100.0	100.0
	Repeaters	262	194	28.1	34.4
	Passed	328	185	35.2	32.8
	Dropped out	341	184	36.6	32.6
1991	Enrollment	611	522	100.0	100.0
	Repeaters	184	225	30.1	43.1
	Passed	215	166	35.1	31.8
	Dropped out	212	131	34.6	25.0
1992	Enrollment	587	440	100.0	100.0
	Repeaters	216	112	36.7	25.4
	Passed	225	194	38.3	44.0
	Dropped out	146	134	24.8	30.4
1993	Enrollment	627	337	100.0	100.0
	Repeaters	237	87	37.7	25.8
	Passed	192	163	30.6	48.3
	Dropped out	198	87	31.5	25.8
1994	Enrollment	680	279	100.0	100.0
	Repeaters	n.a.	n.a.	n.a.	n.a.
	Passed	n.a.	n.a.	n.a.	n.a.
	Dropped out	n.a.	n.a.	n.a.	n.a.

Source: Ministry of Education and Community Development. Enrollment figures may vary from other official estimates, since these data are from a special study which may not have included students for whom complete data were not available

Table A-13

Senior Secondary Vocational School (NATIN -- Four Year Terminal Program) Progression, Repetition and Dropout, by Grade, Gender, and Year, 1989-1994

Year	# of Students		Gra	Grade 11			Grade 12	e 12			Grade 13	le 13			Grade 14	le 14		9	Grand Total	otal
	0	¥	я	Total	4%	W	ħ	Total	%F	M	¥	Total	9%F	×	F	Total	∳%F	M	F	TOTAL
1989-0	Enrollment	506	40	246	91	136	707	156	13	29	=	78	14	61	6	70	13	470	08	550
	Passed	83	21	104	20	57	12	69	17	57	8	65	12	56	6	65	14	253	20	303
	Repeaters	74	=	85	13	74	7	81	6	10	3	13	23	5	0	5	0	163	21	184
	Dropped out	49	∞	57	14	5	-	9	17	0	0	0	0	0	0	0	0	54	6	63
1990-1	Enrollment	235	40	275	15	157	28	185	15	29	14	81	17	62	∞	70	11	521	8	611
	Passed	75	24	95	25	69	17	98	70	48	01	58	17	54	7	61	11	246	58	304
	Repeaters	74	2	84	12	52	∞	09	13	10	3	13	23	9	-	7	14	142	21	163
	Dropped out	98	9	92	7	36	3	39	8	6		10	01	2	0	2	0	133	=	144
1991-2	Enrollment	274	44	328	13	132	34	166	20	79	20	66	20	54	10	64	16	539	108	647
	Passed	79	22	101	22	19	23	84	27	48	15	63	23	40	10	50	20	228	70	298
	Repeaters	68	12	101	12	46	7	53	13	21	5	26	61	13	0	13	0	169	24	193
	Dropped out	106	2	116	6	25	4	29	14	10	0	10	0	-	0	-	0	142	14	156
1992-3	Enrollment	308	36	344	10	130	30	160	19	98	29	115	25	62	15	77	19	588	110	869
	Passed	116	24	140	17	83	22	105	21	19	17	78	22	54	6	63	14	314	72	396
	Repeaters	72	9	78	∞	26	4	30	13	11	6	20	45	&	5	13	38	117	24	141
	Dropped out	120	٥	126	5	21	4	25	91	14	3	17	18	2	-	3	33	157	14	171

Source: Statistics Office, Ministry of Education and Community Development.

Table A-14

Number of Junior Secondary Technical School (NATIN) Students by Area of Specialiation by Gender and Year, 1989/90 - 1993/94

	% F	01	4	13	25	0	27	17	<i>L</i> 9	90	62	16
1992-1993	Tot	273	125	40	∞	134	22	35	9	4	106	753
199	H	27	5	5	2	0	9	9	4	2	99	123
	M	246	120	35	9	134	91	29	2	7	40	630
	% F	10	3	13	21	0	17	26	50	50	72	91
1993	Tot	344	78	31	14	103	24	27	2	4	72	669
1992-1993	F	36	2	4	E.	0	4	7	-	2	52	Ξ
	M	308	76	27	=	103	20	20		2	20	288
	% F	14	2	22	14	0	5	16	50	29	70	17
1991-1992	Tot	318	89	23	22	79	20	25	4	3	64	647
1991	F	44	2	5	33	0		4	2	2	45	108
	M	274	87	18	19	79	19	21	2	1	19	539
	% F	15	4	32	11	0	0	10	25	0	63	15
1991	Tot	275	129	61	18	83	19	29	4	8	54	611
1990-1991	F	40	5	9	2	0	0	3	1	0	34	90
	M	235	124	13	16	83	61	26	3	8	20	521
	% F	16	4	25	31	0	0	9	25	10	87	15
1989-1990	Tot	246	100	12	13	61	13	31	8	10	46	550
1989	R	40	4	3	4	0	0	7	2	1	24	80
	M	206	96	6	19	19	13	29	9	6	22	470
Subject	Area	Basic Year	Electronics	Construction	Civil Engineering	Mechanics	Mining	Agriculture	Mapping & Surveying	Meteorology	Chemical Analysis	TOTAL

Table A-15

Enrollment in Junior Secondary Technical School (NATIN)
by Age, Gender, and Year, 1989/90 - 1992/93

Age	1989-	1990	1990-	1991	1991-	1992	1992-	1993	1993-	1994
	М	F	M	F	M	F	M	F	M	F
16	1	0	0	0	0	2	2	0	0	
17	13	12	21	11	39	15	26	9	38	1
18	56	18	56	19	54	18	25	19	52	1
19	95	14	80	23	104	20	104	19	90	2
20	67	13	123	16	100	23	122	24	105	1
21	98	18	83	6	98	16	100	16	111	1
22	59	3	81	13	57	5	73	14	72	1
23	45	l	36	2			2	42		
24	7	0	28	0	22	0	28	6	24	
25	5	1	7	0	7	0	17	0	14	
26	3	0	4	0	5	0	6	1	5	
27	0	0	1	0	2	0	0	0	0	
unknown	1	0	1	0	0	0	3	0	3	
Total	470	80	521	90	539	108	638	110	556	10

Table A-16

Number of Technical School (TC-NATIN) Students Passing Final Examination, by Area of Specialization, Gender and Year, 1989/90 - 1992/93

Subject Area		1989-1	990	1	990-1	991	1	991-19	92		1992-19	93
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Electronics	20	2	22	12	n.a.	12	10	n.a.	10	12	n.a.	12
Construction	4	n.a.	4	3	2	5	1	2	3	5	n.a.	5
Civil Engineering	4	n.a.	4	2	n.a.	2	3	n.a.	3	3	n.a.	3
Mechanics	14	n.a.	14	21	n.a.	21	12	n.a.	12	16	n.a.	16
Mining	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	6	n.a.	6	5	n.a.	5
Agriculture	7	n.a.	7	6	n.a.	6	5	1	6	8	1	9
Mapping & Surveying	1	n.a.	1	2	1	3	l	n.a.	1	n.a.	n.a.	0
Meteorology	2	1	3	3	n.a.	3	n.a.	n.a.	0	n.a.	n.a.	0
Chemical Analysis	4	6	10	5	4	9	2	7	9	5	8	13
TOTAL	56	9	64	54	7	61	40	10	50	54	9	63

Table A-17

Enrollments in Tertiary Education (Selected Years: 1989/90 - 1994/95)

		198	06/68			199	16/0661			199	1991/92			199	1994/95	
Type of Education	M	F	Total	% F	M	Ŧ	Total	% F	¥	R	Total % F		M	Я	Total	% F
University of Suriname	1227	937	2164	43	1239	1021	2260	45	1174	1030	2204	47	1182	1280	2462	52
Institute for Advanced Teacher Training (IOL)	632	1225	1857	99	508	1037	1545	67	504	974	1478	99	442	897	1339	19
Training College for Technical School Teachers (LOBO)	68	0	89	0	n.a.	n.a.	n.a.	n.a.	691	=	180	9	51	0	51	0
Academy of Arts (a professional school) (AHKCO)	95	114	209	55	78	114	192	59	08	125	205	19	n.a.	n.a.	183	n.a.
Total	2043	2276	4319	53	n.a.	n.a.	n.a.	n.a.	1927	2140	4067	53	n.a.	n.a.	4035	n.a.

Sources: Ministry of Education, Division of Research and Planning; Suriname University Bureau of Student Affairs.

Table A-18

Student Enrollment at the Faculty of Technology and Faculty of Medicine, University of Suriname by Gender and Program of Study

		Mining		γ	Agricultu	ture	CIVII	Civil Engineering	ering	Electi	Electrical Engineer	igineer	Co	Construction	10		FA	FACULTY OF MEDICINE	OF
Year	Σ	F	Total	N	F	Total	M	Я	Total	N	F	Total	W	Œ	Total	Sub-total	×	4	Total
1983	17	3	20	7.2	14	51	37	10	47	38	2	40	38	0	38	961	81	45	126
1984	20	7	27	24	16	40	39	14	53	42	2	44	40	0	40	204	107	64	171
1985	22	7	29	29	18	47	39	10	49	38	1	39	49	0	49	213	125	86	223
1986	24	5	29	33	24	57	48	14	62	45	2	47	49	0	49	244	160	115	275
1987	24	7	31	38	21	59	52	12	64	43	1	44	53	0	53	251	185	121	306
1988	23	9	29	44	31	7.5	53	11	64	43	3	46	53	0	53	267	216	145	361
1989	35	5	40	99	47	113	19	10	11	53	3	56	71	0	7.1	351	220	161	381
1990	37	∞	45	64	45	109	64	11	75	84	4	88	29	0	29	384	216	168	384
1661	36	16	52	61	39	100	46	6	28	76	5	81	89		69	360	214	158	372
1992	37	20	23	45	48	93	52	12	64	79	9	85	58	7	09	359	199	155	354
1993	45	28	73	\$\$	44	66	51	23	74	09	7	67	53	3	99	369	170	142	312
1994	48	32	08	65	43	102	43	24	29	75	10	85	74	2	9/	410	167	143	310
1995	49	34	83	52	45	26	48	30	78	80	13	93	71	9	77	428	164	153	317
1996	40	32	72	43	36	62	40	28	89	63	12	75	56	4	09	354	170	179	349

Source: University of Suriname.

Table A-18a

Student Enrollment in the Faculty of Social Science at the University of Suriname by Gender and Program of Study

J.	FINI	Total	554	656	733	932	1011	1162	1368	1406	1329	1271	1272	1322	1340	1177	
DVERALI	ENKOLLMENI	14	45	49	86	115	121	145	191	168	158	155	142	143	153	179	
0	ENK	Σ	509	592	635	817	890	1017	1207	1238	1171	1116	1130	1179	1187	866	
	no	Total	15	15	15	12	10	6	∞	10	8	8	90	70	85	85	
	Education	н	13	13	12	10	7	7	7	7	2	4	59	48	53	63	
		M	2	2	3	2	3	7	-	3	3	4	31	22	22	22	
ر	ration	Total	18	16	6	79	83	104	76	65	54	56	65	57	97	128	
Public	Administration	Ŀ	2	2	0	18	22	35	28	26	23	26	30	24	56	71	
	¥	Σ	16	14	6	61	61	69	48	39	31	30	35	33	41	57	
		Total	251	278	280	349	370	495	645	654	638	705	108	884	936	962	
	Law	ч	114	129	134	176	187	273	329	353	371	410	478	549	593	516	
		M	137	149	146	173	183	222	316	301	267	295	323	335	343	280	
	gy	Total	26	38	35	47	19	74	79	82	74	95	47	43	39	24	
	Sociology	н	22	32	29	37	47	54	19	63	56	43	37	34	31	21	
		M	4	9	9	10	14	07	81	81	82	13	2	6	∞	3	
w	ation	Total	142	207	229	293	334	384	447	480	502	473	467	552	009	492	
Business	Administration	F	61	94	101	130	156	177	210	227	244	236	235	298	352	295	
	Adr	M	18	113	128	163	178	207	237	253	258	237	232	254	248	197	
ы	lcs	Total	69	73	84	96	126	145	181	200	193	156	142	132	134	72	
Planning	Economics	됨	38	37	43	47	92	08	8	108	103	68	77	72	73	45	
<u> </u>	Ħ	M	31	36	14	49	56	65	18	92	06	19	65	09	19	27	
		Year	1983	1984	1985	1986	1987	1988	6861	1990	1991	1992	1993	1994	1995	1996	

Source: University of Suriname.

Table A-19
Instructional and Research Staff at University of Suriname, 1996

Faculty of Social Sciences			full time	42
(Instructional Staff)			part time	40
Institute for Social Research (Research Staff)			full time	2
One Year Preparatory Program (Instructional Staff)			full time	30
Faculty of Medicine			full time	7
(Instructional Staff)			part time	39
Faculty of Technology			full time	42
			part time	58
Research Institute for Natural Resources (Inorganic)			full time	2
Research Institute for Natural Resources (Organic)			full time	1
	Total	Full	time	167
	Total	Part	time	99
	TOTAL			266

Table A-20

Number of Instructional and Non-Instructional Staff in
Tertiary Education Institutions, 1983-87

Year	Administration and Technical Services	Full-time Instructional Staff	Part-time Instructional Staff	Student Assistantships	Student Assistantships in Library
1983	258	77	66	n.a.	n.a.
1984	265	60	117	n.a.	n.a.
1985	153	64	175	72	20
1986	159	73	170	83	18
1987	266	68	134	64	24

Source: University of Suriname.

Table A-21

Enrollment in Junior Secondary Teacher Training by Age by Gender and Year, 1989/90 - 1992/93

Age	1989-	1990	1990	-1991	1991-	1992	1992-	1993	1993-	1994
	M	F	M	F	M	F	M	F	M	F
16	0	3	0	3	0	2	1	1	3	3
17	12	31	3	35	16	49	4	34	8	22
18	32	93	19	77	24	96	24	94	14	62
19	40	117	39	108	24	103	32	116	18	102
20	48	154	40	118	41	119	30	110	32	10
21	51	145	30	116	36	100	27	89	27	93
22	47	112	32	100	21	69	19	64	18	63
23	21	52	26	59	15	53	12	33	12	36
24	8	44	7	26	15	37	7	28	7	16
25	7	7	3	17	5	20	5	11	2	8
26	3	16	2	8	0	12	2	10	1	14
unknown	0	2	7	12	0	2	4	9	0	2
Total	269	776	208	679	197	662	167	599	142	539

Table A-21a

Comparisons of Pupil Enrollments, Pupil-Teacher Ratios, and Public Expenditures on Education 1990 (Selected Countries)

			Enro	Enrollments		Public Expenditures - 1990	litares - 1990	
	Enrollment	Pupil-Teacher Ratio	er Ratio	. 4		Educas %	Primary &	Tries and a
Country	Ratio, 1990 (% age 6-23 enrolled)	Primary 1990	Secondary 1990	Secondary Technical Enrollment	Education as a % of GNP	of Lotal Covernment Expenditure	Secondary Educ as % of all Levels	nigner Educ as a % of all Levels
Barbados	n.a.	17	n.a.	n.a.	8.0	n.a.	75	19
Belize	n.a.	25	14	1.3	0'9	n.a.	n.a.	n.a.
Brazil	09	23	14	n.a.	4.6	n.a.	56	26
Colombia	55	30	20	21.5	2.9	21.4	09	21
Costa Rica	n.a.	32	61	22.2	4.6	20.8	48	36
Cuba	63	13	10	32.2	9:9	12.8	65	14
Dominica	n.a.	29	n.a.	1.1	8.8	9'01	87	3
Dominican Republic	99	41	n.a.	n.a.	2.1	n.a.	n.a.	п.а.
El Salvador	51	40	28	n.a.	8.1	n.a.	n.a.	n.a.
Guyana	65	34	n.a.	3.4	4.7	n.a.	n.a.	n.a.
Haiti	n.a.	29	n.a.	n.a.	1.8	20.0	72	6
Jamaica	19	31	56	3.5	6.1	12.9	7.1	21
Panama	62	20	61	25.6	5.5	n.a.	09	21
Suriname	69	23	12	27.1	8.3	n.a.	75	6
Trinidad and Tobago	99	26	n.a.	8.0	4.1	11.6	79	12
Venezuela	63	23	6	971	4.1	18.8	n.a.	n.a.
Source: Academy for	Academy for Educational Development	ment						

Table A-22

Teacher Training College (PA --Four Year Terminal Program)
Progression, Repetition and Dropout, by Grade, Gender, and Year, 1989-1994

Year	# of Students Entering	5	Grade 11	-		Grade 12	2	0	Grade 13	.3	9	Grade 14	4	•	TOTAL	
	0	W	F	Total	M	F	Total	M	Œ	Total	N	В	Total	M	F	Total
1989-0	Enrollment	06	224	314	114	276	390	32	152	184	33	124	151	269	776	1045
	Passed	33	135	168	25	110	135	10	06	100	15	50	65	83	385	468
	Repeaters	28	40	89	36	<i>L</i> 9	103	9	21	27	7	28	35	77	156	233
	Dropped out	29	49	78	43	84	127	10	14	24	5	16	21	87	163	250
	Passed final exam	n.a.	n.a.	n.a.	10	6	19	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10	6	19
1990-1	Enrollment	68	211	300	70	212	282	32	135	191	17	121	138	208	629	887
	Passed	39	110	149	∞	71	79	14	83	26	11	70	81	72	334	406
	Repeaters	20	52	72	28	74	102	7	28	35	9	39	45	19	193	254
	Dropped out	5	13	18	1	2	3	5	8	£1	n.a.	5	n.a.	11	28	39
	Passed final exam	n.a.	n.a.	n.a.	3	20	23	n.a.	n.a.	n.a.	п.а.	n.a.	n.a.	3	20	23
1991-2	Enrollment	68	246	335	11	192	263	11	100	117	20	124	144	197	662	658
	Passed	30	127	151	4	41	45	4	65	69	6	62	71	47	295	342
	Repeaters	23	09	83	29	72	101	9	15	21	7	36	43	99	183	248
	Dropped out	35	28	66	18	30	48	7	20	27	4	25	29	29	133	197
	Passed final exam	n.a.	n.a.	n.a.	13	25	38	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13	25	38

	Total	992	n.a.	n.a.	n.a.	163	
TOTAL	Ŧ	599	n.a.	n.a.	n.a.	117	
1	M	167	n.a.	n.a.	n.a.	46	
+	Total	116	48	42	26	n.a.	
Grade 14	¥	103	45	38	20	n.a.	
9	W	13	ε	4	9	n.a.	
3	Total	58	38	9	11	n.a.	
Grade 13	£	52	33	6	10	n.a.	
	W	9	5	0	1	n.a.	
2	Total	263	11	94	39	65	
Grade 12	F	707	63	74	30	35	
	M	19	∞	20	6	24	
-	Total	329	162	08	87	n.a.	
Grade 11	И	242	125	09	57	n.a.	
	Σ	87	37	70	30	n.a.	
Year # of Students Entering		Enrollment	Passed	Repeaters	Dropped out	Passed final exam	
Year		1992-3					

Source: Ministry of Education and Community Development.

Enrollment figures may vary from other official estimates, since these data are from a special study which included students for whom complete data were available.

Table A-23

Enrollment in the Advanced Teacher Training College (IOL), Selected Years, 1990-1996

Subject Area		1990-1991	1		1992-93			1994-95			1995-96	
	1.0	MOA	MOB	PO	MOA	MOB	0'1	MOA	MOB	LO	MOA	MOB
Dutch	72	65	20	42	37	14	40	27	\$	37	21	5
English	41	84	14	31	75	4	52	73	3	45	<i>L</i> 9	2
Spanish	46	34	14	32	30	11	33	24	30	30	26	28
Mathematics	16	0/	28	110	57	11	82	44	6	83	39	9
Physics	41	32	5	37	15	3	15	12	1	17	13	
Biology	54	23	17	23	32	6	41	37	3	42	30	
Chemistry	20	30	2	14	27	n.a.	20	31	п.а.	33	28	n.a.
Geography	6	64	91	19	52	16	70	44	6	59	33	7
History	39	68	5	33	27	3	45	24	3	42	27	-
Economics	159	56	n.a.	125	62	n.a.	212	67	n.a.	244	59	n.a.
Music	20	L	n.a.	32	3	n.a.	23	n.a.	n.a.	23	-	n.a.
Teaching methods	13	2	n.a.	4		n.a.			n.a.		n.a.	n.a.
Drawing	25	91	n.a.	21	11	n.a.	23	8	n.a.	17	9	n.a.
Clothing making	40	3	n.a.	19	-	n.a.	16	10	n.a.	24	10	n.a.
Home Econ	40	n.a.	n.a.	46	n.a.	n.a.	30	n.a.	n.a.	25	n.a.	n.a.

Subject Area		1990-1991	1		1992-93			1994-95			1995-96	
	07	MOA	MOB	10	MOA	MOB	ОТ	MOA	MOB	ΓO	MOA	MOB
Physical Educ	18	33	33	19	16	6		16	9	10	11	n.a.
Teaching methods (in subject area)	n.a.	134	46	n.a.	84	30	n.a.	65	28	n.a.	69	19
Special Educ	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pedagogical practices	30	2	n.a.	45	3	n.a.	n.a.	n.a.	n.a.	81	n.a.	n.a.
Pre-primary Educ	n.a.	39	n.a.	11.8.	13	n.a.	n.a.	5	n.a.	n.a.	2	n.a.
TOTAL	846	<i>211</i>	200	694	546	110	703	488	97	813	442	70
Source: Ministry of Education and Community Development.	of Educatic	n and Com	munity Deve	:lopment.								
LO = Qualifies graduates to teach in primary and lower junior secondary grades. MOA = Qualifies graduates to teach in upper junior secondary and lower senior secondary grades. MOB = Qualifies graduates to teach in upper grades of senior secondary.	iduates to graduates t	teach in pri to teach in to to teach in t	mary and lov upper junior upper grades	wer junior a secondary of senior s	secondary gand lower secondary.	rades. senior seco	ndary grad	les.				

Table A-24 Graduates from the Advanced Teacher Training College (IOL)

TOT MOA MOB Total TO MOA MOB Total TO MOA MOA </th <th>Subject Area</th> <th></th> <th>1990</th> <th>1990-1991</th> <th></th> <th></th> <th>1991</th> <th>991-1992</th> <th></th> <th></th> <th>1992</th> <th>1992-1993</th> <th></th> <th></th> <th>1993.</th> <th>1993-1994</th> <th></th> <th></th> <th>1994</th> <th>1994-1995</th> <th></th>	Subject Area		1990	1990-1991			1991	991-1992			1992	1992-1993			1993.	1993-1994			1994	1994-1995	
hy 9 3 0 13 17 3 7 27 8 3 0 11 6 1 1 3 3 0 13 17 3 7 27 8 3 0 11 7 2 1 1 8 3 0 3 6 4 0 2 6 12 12 13 15 15 10 2 1 2 3 2 3 7 5 1 6 4 0 1 2 1 6 4 0 0 1 2 3 3 4 4 6 0 0 0 0 4 0		63		МОВ	Total		MOA	MOB	Total	07	MOA	MOB	Total	1.0	MOA	МОВ	Total	07	MOA	MOB	Total
Fig. 6 1 1 1 8 3 1 0 3 1 0 1 2 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	Geography	6	3	0	12	10	3	0	13	17	3	7	72	∞	3	0	=	=	0	٥	=
Find T. S. T	Biology	9	1	1	8	3	0	3	9	4	0	2	9	12	0	3	15	4	0	٥	4
ping 8 0 1 9 2 0 0 2 3 1 0 4 ping 8 2 0 0 24 6 0 0 2 2 0 4 con 1 2 0 0 2 4 6 0 6 2 2 0 4 con 1 0 0 0 0 2 4 0 0 4 3 0 1 0 1 con 0 0 0 0 0 0 0 4 0	English	7	2	0	6	18	2	3	23	7	\$	0	12	3	~	0	8	9	3	0	=
ping 8 2 0 10 21 3 0 24 6 0 6 2 2 2 4 con 2 0 0 2 1 0 0 1 0 0 1 0 0 1 0	History	9	-	0	7	8	0	-	6	2	0	0	2	3	-	0	4	4	2	٥	9
con 1 0 0 2 1 0 0 1 0 0 1 0 1 0 1 0 0 1 0	Bookkeeping	*	2	0	10	21	3	0	24	9	0	0	9	7	2	0	4	13	-	٥	14
con 1 0 1 2 0 2 4 0 4 0 4 3 0 4 3 0 4 3 0 4 3 0	Crafts	2	0	0	2	2	0	0	2	1	0	0	-	٥	-	0		0	0	٥	0
0 0	Home Econ	-	0	0	-	2	0	0	2	4	0	0	4	3	0	0	3	0	0	0	0
3 0	Sports	٥	2	0	2	3	\$	1	6	1	3	0	4	4	2	2	8	2	-	٥	3
4 3 6 4 0 10 5 2 0 7 1 0 1 0 1 0 4 1 0 7 1 0 1 4 0 4 18 8 3 0 11 0 11 0 1 4 0 4 18 8 3 0 11 1 </td <td>Music</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>. 3</td> <td>0</td> <td>3</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>7</td> <td>0</td> <td>٥</td> <td>7</td>	Music	0	0	0	0	0	0	0	0	0	. 3	0	3	0	0	0	0	7	0	٥	7
3 8 8 1 18 19 7 10 36 14 0 4 18 8 3 0 11 (in) 80 0 80 164 0 164 79 0 0 79 85 0 0 85 y 0 0 0 0 0 0 0 0 0 0 0 3 y 0	Physics	4	3	0	7	9	4	0	10	\$	2	0	7	_	0	0	-	0	0	٥	0
3 (in) 80 0 80 164 0 164 79 0 0 79 85 0 0 85 y 0 0 0 0 0 0 0 0 0 0 0 3 y 0	Dutch	6	8	1	18	19	7	10	36	14	0	4	18	∞	3	0	Ξ	6	-	-	=
y 0 0 0 9 2 0 0 2 1 2 1 2 0 3 7 1 0 8 13 3 0 16 7 6 0 13 9 5 0 14 8 2 4 0 4 3 1 0 4 0 1 0 1 0 1	Teaching methods (in subject area)	08	0	0	80	164	0	0	164	79	0	0	79	82	0	0	85	78	0	0	78
7 1 0 8 13 3 0 16 7 6 0 13 9 5 0 14 3 2 0 0 2 4 0 0 4 3 1 0 4 0 1 0 1	Chemistry	0	0	0	0	6	0	0	6	2	0	0	2	-	2	0	3	0	ļ	٥	-
2 0 0 2 4 0 0 4 3 1 0 4 0 1 0 1	Spanish	7	1	0	8	13	3	0	16	7	9	0	13	6	2	0	14	9	-	-	8
	Drawing	2	0	0	2	4	0	0	4	3	_	0	4	0	-	0	-	-	0	٥	

		-			
	Total	1	11	0	9
5661	MOB	0	2	0	2
1994-1995	A MOB Total LO MOA MOB Total LO MOA MOB Total LO MOB TOTAL LO MOB TOTAL	0 5 0 0 0 0 2 0 0 2 1 0 0	1 13 17 3 0 20 7 1 1 9 9 0 2 11	0	6 2
	07		6	4 0 0	-
	Total	2	6	4	14
.1994	MOB	0	-	2	7
1993-1994	MOA	0	1	7 0 2 2	2 10 0 5 0 5 0 7 7 14 1
	1.0	2	7	0	0
	Total	0	20	7	S
1992-1993	MOB	0	0	0 13 0 7 0	0
1992	МОА	0	3	7	S
	1.0	0	17	0	0
	Total	\$	15	13	10
261-166	МОВ	0	1	0	2
1991	MOA	0	1	13	8
	07	\$	13	0	0
	Total	0	22	4	9
1991	MOB	0	2	0	2
1990-1991	LO MOA MOB Total LO MOA	0	2	4	4
	10	0	18	0	0
Subject Area		Clothing making	Mathematics	Kindergarden	Pedagogical practices

Table A-24a

Skill Shortages at Executive Levels of the Government of Suriname Results of a 1996 OAS and National Planning Office Study

Category	Total	BSC Level	MSC Level
Economics	79	35	44
Law	109	29	80
Social Science	89	70	19
Natural Science	27	12	. 15
Technology	92	43	49
Chemistry	5	1	4
Management	10	9	4
Public Administration	7	3	4
Automation	11	11	n.a.
Communications	3	3	n.a.
Statistics	4	2	2
Other	14	12	2
Total	450	230	220
Source: National Planning Of	ffice		

Table A-25

Results of Primary School Completers' Examination (Not Including School Exam) by District, 1994-1995

No REBULT (STUDENT MOVED; EIC.)	59	25	9	8	2	13	0	3	0	3	119	
FALED TEST BUT CAN RETAKE, THESE STUDGETS ARE OLDER THAN 13 BUT NOT LET 14, 30 THEY CAN REPRAT CRADE 6 OR THE SCHOOL CAN ADVISE THEM INTO A LOWER TECHNICAL. IR. SEC. OPTION	338	191	36	40	8	22	5	15	8	8	641	
FALLED BUT CAN NETAKE TEST AND ARE YOUNG ENOUGH TO REFEAT GRADE 6	1,304	706	88	202	70	210	31	45	14	13	2,683	
RECEIVED LOW PASS; SCHOOL CAN ADVISE THEN INTO A LOWER TECHNICALJE, SEC. OPTION	379	172	53	41	8	38	91	47	13	29	796	
PASSED WITH SCORE AAAKING THEM ELICIBLE FOR TECHNICAL SCHOOL (LBGO).	716	302	70	83	40	142	7	46	22	11	1,445	
PASSED WITH SCORE NAKING THEM ELICIBLE FOR ACADEMIC JR. SEC (MULO)	1,271	693	120	190	132	421	22	53	36	15	3,953	
NUMBER OF STUDENTE	5,067	2,059	373	564	260	846	81	209	93	85	9,637	
District	Paramaribo	Wanica	Para	Comewijne	Saramacca	Nickerie	Coronie	Marowijne	Brokopondo	Sipaliwini	TOTAL	

Table A-26

Results of Primary School Completers' Examination (Including School Exam) by District, 1994-1995

Paramaribo 4,845 Wanica 1,947 Para 305 Comewijne 533 Saramacca 211	STORE)	PASEED WITH ECORE NAKING THEM KLIGHELE FOR TECHNICAL SCHOOL (LBGO)	FOIDDL CAN ADVISE THEM 18TO A LOWER TECHNICAL JR. SEC. OPTION	FALLED BUT CAN RETAKE TEST AND ARE YOUNG BYOUGH TO REPEAT CRADE 6	BUT NOT YET 14, 80 THEY CAN. REPEAT CRADE 6 OR THE SCHOOL. CAN ADVISE THEM INTO A LOWER. TECHNICAL JR. SEC. OFTION	NO REBULT (STUDENT MOVED, ETC.)
1,	2,500	969	255	912	181	301
	863	256	94	528	114	92
	66	44	34	78	32	18
	244	89	29	115	28	49
	100	36	7	47	8	13
Nickerie 628	412	06	16	41	17	52
Coronie 78	23	13	9	27	4	5
Marowijne 237	97	95	41	35	15	17
Brokopondo 106	35	14	34	15	4	4
Sipaliwini 91	17	20	28	13	3	10
TOTAL 8,981	4,372	1,287	544	1,811	406	561

Source: Examination Bureau, Ministry of Education and Community Development.

Table A-27

Results of Junior Secondary School Completers' Examination and National Completers' Examination, 1995-1996

Subject	School Test	National Test
Dutch	6.7	5.6
English	6.7	5.8
Spanish	6.3	5.5
Math	5.7	5.0
Physics	5.8	4.6
Geography	6.8	5.8
History	6.6	5.6
Biology	6.8	5.4
Drawing	6.7	6.5

Note: Does not include data for one school for which data were unavailable.

Table A-28

Results of Junior Secondary School Completers' Examination by Year, 1990-1996

	Jr. Sec.	Completers' Ex	amination	Admitted
Year	Passed	Failed	May Retake Exam*	to Sr. Sec. School**
1990	45.4%	32.4%	12.6%	28.9%
1991	35.4%	42.9%	13.4%	19.4%
1992	44.9%	38.6%	14.3%	29.0%
1993	37.1%	12.8%	12.8%	23.9%
1994	42.2%	35.7%	14.9%	27.0%
1995	37.9%	40.8%	14.0%	23.0%
1996	41.0%	39.3%	12.7%	n.a.

- * Tests are given in each of seven subjects. Tests are scored on a ten point scale (1=fail to 10=(high pass). Students who pass four subjects but get a score of five in three tests can retake the same test one week later in up to two of those subject areas.
- ** This test is used both to determine a students' eligibility for a Junior Secondary Completers' Certificate and to determine eligibility for admission to a university track senior secondary option (MULO) and senior secondary vocational (HBO). After eligibility for a certificate is determined, some of the same underlying tests are rescored (e.g., combined) into a new score which is used to determine the Senior Secondary option a junior secondary school leaver is eligible to attend. The percentage figures in this column indicate the percent of test takers who were eligible to a university track senior secondary option (MULO or HBO).

Table A-29

Results of Primary School Completers' Examination, by Year, 1990-1996

Disposition \ Year	1990	1991	1992	1993	1994	1995	1996
Number of Students	8747	9212	8594	8695	9639	8768	8627
Passed with score making them eligible for academic Jr. Sec (MULO)	36.6%	47.4%	39.8%	27.0%	49.6%	50.0%	51.0%
Passed with score making them eligible for technical school (LBGO)	15.9%	15.3%	14.6%	12.0%	13.9%	14.7%	14.3%
Received low pass, school can advise them into a lower technical Jr. Sec. option	9.6%	7.3%	10.1%	12.1%	6.9%	6.2%	6.0%
Failed but can retake test and are young enough to repeat grade 6	29.0%	23.0%	26.9%	35.8%	23.3%	21.8%	22.9%
Failed test but can retake, These students are older than 13 but not yet 14, so they can repeat grade 6 or the school can advise them into a lower technical Jr. Sec. option	7.4%	5.5%	7.4%	11.9%	5.3%	4.7%	4.0%

Table A-30

Number of Schools, by Level, Type, and Region, 1994

	Cong	Pro		General	Jr. &c.	Jr. Sec.	Jr. Sec. Elem.	Jr. Sec. Elem.	Jr. Sec. Home	Jr. Sec. Special	General	Sr. Sec.	Sr. Sec.	
	Educ.	School	Primary	Jr. Sec.	Vocat	Tech.	Vocat.	Tech.	Econ.	Educ.	Sr. Sec.	Vocat	Tech.	TOTAL
District	RO	KO	ОПЭ	MULO	LBGO	LTO	EBO	ETS	CNT	VBO				
Dorimaribo	21	×	118	31	22	4	2	2	2	5	31	n.a.	n.a.	246
Wanica	. 5)	20	4 (∞ (4 %	n.a. n.a.	n.a. n.a.	71
Para	4 .		61	7 (7 6		_				7	n.a.	n.a.	32
Commewijne			23	7 -							-	n.a.	n.a.	78
Marowijne			16		٠ -						_	n.a.	n.a.	20
Saramacca	-	_	2 "	•								n.a.	n.a.	4
Coronie	,		27	v	- (*)	_		_			~	n.a.	n.a.	45
Nickerie	7		13	·)						-	n.a.	n.a.	15
Sinliwini			6 9	•								n.a.	n.a.	40
TOTAL	ž	~	332	47	42	5	3	3	2	9	47	n.a.	n.a.	530
IOIAL	3	٥	200											
Sames Ministry of Education and Community Development.	ter, of Edu	ration and C	Community De	evelopment.										
Source: Ivining	out of the	וכמנוסוו מוופ	(

Table A-31

Results of Junior Secondary School Completers' Examination (Including School Exam) by District, 1995-1996

						Number (Number of Students				
	Number	Number	Passing	ing	Retaking Test	ig Test	Failing	ing	No R	No Results	Range of %
District	Schools	Students	Number	%	Number	%	Number	%	Number	%	Individual Schools
Paramaribo	28*	1,829	875	47.8%	193	10.5%	902	38.6%	55	3.0%	12.0 % to 72.2%
Wanica	9	428	194	45.3%	46	10.7%	183	42.7%	5	1.0%	17.0% to 50.6%
Para	2	50	28	\$6.0%	12	24.0%	6	18.0%	1	2.0%	53.4% to 60.0%
Comewijne	2	139	51	36.7%	19	13.7%	99	46.8%	4	2.9%	29.4% to 46.2%
Saramacca	1	<i>LL</i>	18	23.4%	7	%0.6	45	58.4%	7	9.1%	23.4% to 23.4%
Nickerie	5	371	135	36.4%	32	8.6%	192	51.7%	12	3.2%	29.1% to 43.4%
Coronie	0	0	0	%0	0	%0	0	%0	0	0%	n.a.
Marowijne	1	57	32	56.1%	6	15.8%	15	26.3%	1	1.8%	56.1% to 56.1%
Brokopondo	1	9	2	33.3%	1	16.7%	3	2.0%	0	•	33.3% to 33.3%
Sipaliwini	0	0	0	%0	0	%0	0	%0	0	-	п.а.
TOTAL	46	2,957	1,335	45.1%	319	10.8%	1,218	41.2%	85	2.9%	

Source: Examination Bureau, Ministry of Education and Cultural Development.

All data for one school missing, school omitted from this count.

Table A-32

Results of Primary School Completers' Examination (Including School Exam) by District, 1994-1995

Region	Districts Included	Passed with Score Making them Eligible for Academic Jr. Sec. (MULO)	Passed with Score Making them Eligible for Technical School (LBGO)
Urban	Paramaribo Wanica	50%	14%
Coastal	Para Comewijne Saramacca Nickerie Coronie	47%	13%
Interior	Marowijne Brokopondo Sipaliwini	30%	19%

Source: Examination Bureau, Ministery of Education and Community Development.

Table A-33

National Budget by Ministry

	19	93	199	94	199	95
Ministry	Requested	Received	Requested	Received	Requested	Received
Justice and Police	123,611	178,356	232,389	759,464	709,257	4,101,195
Internal Affairs	42,410	80,376	86,338	284,252	243,146	2,107,943
Regional Development	43,634	71,509	73,074	266,049	186,763	1,266,260
Defence	133,580	177,348	184,000	646,928	826,954	3,000,014
Foreign Affairs	22,489	93,261	200,000	1,636,974	1,438,585	4,219,437
Planning and Development Aid	119,610	251,895	7,894,145	7,931,000	7,932,197	93,796,252
Finance	397,099	586,417	552,682	1,108,135	2,023,971	7,782,825
Trade and Industry	16,744	24,424	23,556	379,378	303,005	534,042
Agriculture and Fisheries	72,244	110,020	133,934	766,098	613,763	2,325,297
Natural Resources	75,709	222,715	192,752	4,953,124	3,174,418	10,251,787
Labor	24,606	33,736	37,620	86,647	74,052	344,656
Social Affairs and Housing	216,178	338,622	346,385	1,024,357	952,326	4,014,380
Education and Community Development	409,574	524,782	627,453	2,719,331	2,332,632	9,876,570
Health	103,627	174,161	174,657	624,164	701,460	3,267,818
Public Works	137,203	407,006	407,006	1,183,157	2,360,276	7,750,339
Transportation, Communication & Tourism	57,525	84,195	193,540	1,052,001	897,832	2,302,527
Total Expenditures	1,995,843	3,228,315	11,359,531	25,421,059	24,770,637	156,941,34 2
Education Share of National Budget		16.26%	_	10.70%	_	6.29%

Table A-34

Annual Budget for the Directorate of Education, by Category of Expenditure, 1993-1995 (Surinamese Guilders, in 000s)

Category	1993	1994	%	1995	%	1996	9%
	Budget	Budget	change	Budget	change	Budget	change
General Operation (representation, celebration, telegrams, etc.)	1,160	1,635	41%	9,210	463%	4,910	47%
Personnel (government teachers and other MOE employees)	205,676	1,291,648	528%	4,325,255	235%	5,226,164	21%
Utilities (electricity, water for schools and MOE)	27,875	69,718	150%	200,777	188%	182,335	%6
Transportation (incl. transport for teachers and students)	28,329	156,624	453%	468,721	200%	472,207	0.74%
Supplies (office supplies, some voc/tech supplies)	20,459	55,909	173%	360,487	545%	386,918	7%
Maintenance and repairs (of schools and MOE buildings)	5,000	60,000	1100%	000,09	%0	000,09	0
Room and Board for residential students (incl. dormitories, subsidies for food, clothing)	850	4,680	451%	16,800	259%	48,000	186%
Subsidies to religious school teachers, administrators and some auxiliary foundations (that care for handicapped children)	187,119	819,044	338%	3,438,377	320%	4,088,092	19%
Other expenditures (teacher insurance, pension fund contribution, etc.)	6,405	62,960	883%	265,666	322%	256,132	3.6%
Total Recurrent Budget	482,873	2,522,236	422%	9,145,293	263%	10,725,458	17%
Capital budget (school construction, etc.)	4,000	70,456	1,661%	195,000	177%	100,000	49%
Total Amount for Education Directorate	486,873	2,592,674	433%	9,340,293	260%	10,825,458	16%
Source: Ministry of Education.							

Table A-35

Number of Available Positions by Sector, 1980-1993

	1980	1985	1990	1991	1992	1993
Agriculture, livestock and fisheries 1/	13,900	13,360	13,523	13,600	13,600	13,000
Forestry and wood processing	3,200	2,900	•	ŧ	•	1
Mining and bauxite processing	6,000	4,542	3,236	3,290	3,350	3,270
Industry	11,180	10,630	10,464	10,360	10,003	0886
Electricity and water	1,260	1,616	1,950	1,730	1,720	1,700
Construction	3,500	2,850	2,400	2,360	2,350	2,320
Commerce, restaurants and hotels	14,500	11,650	11,659	12,090	12,888	12,746
Transport and communications	3,700	3,790	3,601	3,640	3,390	3,390
Banking and insurance	1,359	1,652	1,834	1,845	1,866	1,836
Real estate and property	092	889	999	829	692	710
Government	30,223	35,467	37,947	39,670	37,704	35,734
Other services	3,800	4,218	3,889	3,850	3,610	3,610
Total	93,382	93,363	91,168	93,113	91,173	88,196
Percentage share						
Agriculture and forestry	18.3	17.4	14.8	14.6	14.9	14.7
Mining	6.4	4.9	3.5	3.5	3.7	3.7
Industry	12.0	11.4	11.5	11.1	11.0	11.2
Electricity, water and construction	5.1	4.8	4.8	4.4	4.5	4.6
Government	32.4	38.0	41.6	42.6	41.4	40.5
Other services	25.8	23.6	23.7	23.7	24.6	25.3
 After 1987 "Forestry and wood processing is included in Agriculture, livestock and fisheries. Source: General Bureau of Statistics (ABS). 	sing is included	in Agricultur	e, livestock	and fisheri	es.	

Table A-36
Unemployment Rates (%) by Selected Education Levels

Year	Primary (GLO)	General (MULO)	General A-Stream	General B-Stream	Vocational (LBGO)	Technical (LTO)
1990	8.79	6.56	8.11	9.38	14.84	11.21
1992	8.55	11.19	15.20	14.29	10.93	12.82
1993	8.59	11.90	9.84	3.33	14.16	12.64

Source: General Bureau of Statistics: Household survey and IDB calculations.

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Table A-37

Summary of International Donor Assistance to Education, 1996
(Thousands of Suriname Guilders)

Source	Description of Assistance	1992	1993	1994	1995
	Funds the Dutch Centre for Educational Studies in Developing Countries to provide technical assistance	21	0	11	0
Dutch Aid	Evaluation of educational cooperation within the Dutch cooperation framework	0	0	0	41
	Scholarship program for study abroad I	49	1	75	1,174
	Repair of educational facilities in the interior	1	0	0	873
	Provision of equipment to Medical Faculty of the University of Suriname	129	0	235	245
	Provision of equipment to Vocational/ Technical Schools	170	151	587	1,121
	Provision of supplies to primary schools I	342	0	0	0
:	Scholarship program for study abroad II	0	0	0	137
!	Provision of books for the library at Nickerie	0	34	35	0
	Provision of supplies to primary schools II	408	14	880	1,548
	Provision of books for University library I	0	0	0	1,884
	Assistance to maintain buildings and equipment at the University	0	44	59	214
	Set up apprenticeship program as part of vocational training	38	1	117	664
	To support a coordination unit within the Ministry to administer Dutch aid	1	29	104	29
:	Provision of books to University library II	0	47	117	196
	Support for overall educational cooperation	0	0	293	1467
	Support for overall program of welfare and culture	0	0	116	1,749
	Scholarship program for study abroad III	1,877	804	2,348	4,109
	Support for University Faculty of Law and Faculty of Economics I	0	0	63	0
	Repair of dormitories for senior secondary students	0	0	147	117
	Support for University Faculty of Law and Faculty of Economics II	0	0	552	293

Source	Description of Assistance	1992	1993	1994	1995
	Support for a skills laboratory	144	0	300	200
	Funds for studies	0	0	100	300
Belgian Aid	Funding for University programs	99	0	99	99
	Support for a cooperative program between the University of Suriname and Universities in Belgium.	465	0	500	400
	VVOB cooperation (Provision of Belgian technical assistance to education system in Suriname)	763	0	763	650
	National participation in the W.Pl.M.An. Program	4	0	0	0
European Union	National participation in the Suriname-Ghana Pan- African/Pan-American festival	0	0	0	192
	Support to senior secondary school in Nickerie	18	0	0	0
	TOTAL	4,529	1,125	7,501	1,7702

Source: National Planning Office, Government of Suriname.

Table A-38

Dutch Assistance to Education in Suriname

Focus of Support	Nature of Support	Amount of Support
Primary Education	Provision of instructional materials and school supplies at the primary level	Df 40 million
	Rehabilitation of primary schools in the interior	Df 3.2 million
	Equipment and supplies for primary schools in the interior	Df 6 million
Vocational/Technical	Development of an apprenticeship program; initial focus on tourism, hotel management, construction trades, and printing	Df 1.4 million
Higher Education	Rehabilitation of the university facilities	
	Rehabilitation of the university library, provision of books Equipment for medical faculty	Df 5.6 million
	Scholarship program	Df 40 million, of which Df 20 million remains to be spent
Ministry of Education	Institutional strengthening in support of project management	Df 290,000

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Table A-39
Salary Scale for Teachers and Other Government Employees
March 1996, in Sf

	Civil Service			Teachers				
Minimum	Maximum	Grade	Step	Level	Minimum	Maximum		
152385	164385		24					
135505	152385		23					
125005	140755	G	22	XVI	125005	140755	Salary range for senior	
				XVa	122380	138130	system administrators; secondary school	
114505	130255		21				teachers	
				xv	106630	138130		
104005	109255		20	XIVa	104005	135505		
		F		XIV	987551	35505		
93505	109255]	19					
				XIIIa	88445	130255		
				XIII	88445	125005		
83565	98755		18	XII	83565	119755	Salary range for junior secondary teachers	
83565	98755		17a	ХI				
74570	88445	1	17		74570	109255		
		E		Xa	70830	104005		
67260	79065		16	х	67260	98755		
				IXa	63690	93505		
60130	70830]	15	IX	60130	88445		
60130	70830		14a					
				VIIIa	566660	83565		
53475	63690		14	VIII	53475	79065	Salary range	
		D		VIIa	50550	74570	for primary school teachers	
47700	56660		13	VII	47700	70830		
				VIa	44850	67260		
42020	50550		12	VI	42020	63690		

Civil Service					Teachers				
Minimum	Maximum	Grade	Step	Level	Minimum	Maximum			
42020	50550		lla						
		c		Va	40330	60130	Salary range for primary school		
38640	44850		11	V	38640	56660	teachers		
				IVa	36950	53475			
35260	40330		10	IV	35260	50550			
31880	36950		9	Ш	31880	44850			
31880	36950		8a						
28500	33570		8				1		
25405	30190	В	7	п	25405	36950			
22705	26905		6	I	24055	_			
20125	24055		5						
20125	24055		4a						
17905	21395		4						
15825	18995	A	3						
15320	16855		2						
14814			1						
Source: MOEC	D and Ministry of Do	mestic Affair	2	······································			· · · · · · · · · · · · · · · · · · ·		