



UNITED NATIONS

ECONOMIC
AND
SOCIAL COUNCIL



GENERAL

E/CN.12/924
INST/S.7/L.1

25 November 1971

ENGLISH
ORIGINAL: SPANISH

SECONDARY EDUCATION, SOCIAL STRUCTURE AND DEVELOPMENT
IN LATIN AMERICA

Document presented jointly by the
Economic Commission for Latin America and the
Latin American Institute for Economic and Social Planning
at the Conference of Ministers of Education and those
responsible for the promotion of science and technology
in relation to development in Latin America and the
Caribbean, convened by UNESCO

(Venezuela, 6-15 December 1971)

I. INTRODUCTION

The present work is an attempt to analyse the development of education, particularly secondary education, in the light of the different interpretations of the educational process, with a view to identifying the special features of educational structure in Latin America. For purposes of this paper, this structure is taken to mean the whole constellation of levels of education in the region. It will thus be necessary to compare the structure of education in Latin America with the educational structure, past or present, of countries which are now more developed. This comparison will also provide a more comprehensive basis for consideration of the relationship between education and development.

With this in mind, an attempt will be made to prove the following:

(a) That the structure of education in Latin America does not stem from the kind of process experienced by the European countries at earlier stages of their development. The fundamental difference is that, as early as the beginning of this century, the European countries had managed to provide primary education for almost the entire population; this had a homogenizing effect on the different societies, while at the same time enrolment in secondary and higher education was kept down to a minimum. In Latin America, however, even in the most advanced countries, primary schooling for all children remains an unfulfilled goal.

(b) That secondary education in Latin America has become available to a percentage of the school age population that is equal to or higher than the percentage registered in European countries at an intermediate stage of development. And this despite the fact that only about half of the eligible children finish primary education, which lasts an average of six years.

(c) That the expansion of primary or basic education in the developed countries was not the result of the requirements of industrialization so much as of ethical, religious and basically political motivations. The coverage of

/the primary

the primary system of education evolved out of plans for national integration, and political or ideological mobilization or control, which anticipated the future educational requirements of expanding industrialization. Similarly, in Latin America the educationally most advanced countries originally shared the same motivation for developing basic education.

(d) That the educational structure in Latin America is peculiar in that, while a large percentage of the population is below the minimum educational threshold or outside education altogether, secondary education is growing rapidly without any great relation to development and urbanization, the result being a gradual increase in differentiation. Moreover, the fact that levels of education lack a basic homogeneity has serious and far-reaching implications for economic and social development.

(e) That the growth of secondary education shows that the social groups which are potential users of the system are much more able to put pressure on the decision-making centres than the same groups in other societies. This pressure is not directly related to the job market, but rather to the keen competition for access to the developed area of the job market which exists in every Latin American society.

(f) That, since the greater coverage of secondary education does not stem from development, nor from the expansion of qualitatively demanding job markets, whether or not education can play an active role in the development process will depend on the trend and content of education rather than on the mere growth of the rate of enrolment.

II. EDUCATIONAL SYSTEMS IN LATIN AMERICA

1. Literacy training

The illiteracy rate in the population aged 15 and over in the whole of Latin America dropped from 42.2 per cent in 1950, to 33.9 per cent in 1960, and 23.6 per cent in 1970. As this drop is the result of policies to increase school enrolment rather than of literacy programmes for adults, almost all countries in the region, except Cuba, maintained their relative positions. Table 1 classifies countries by illiteracy rate into groups of less than 10 per cent, between 10 and 20 per cent, etc. up to the group with more than 40 per cent of illiterates aged 15 and over. In each group there are declines in the illiteracy rate, but there are no sharp transitions by which a country moves from a high illiteracy category to a much lower one. To put it another way, the relative distance between the countries with the highest illiteracy rates and those with lowest in general remain much the same. It would seem that the gap between them will only narrow when the more advanced countries reach a point close to zero and are then caught up by the less advanced.

The countries in categories A (less than 10 per cent of illiterates) and B (between 10 and 20 per cent of illiterates) are those which have had a national integration policy since the nineteenth century, in which education has had a fundamental role (Argentina, Costa Rica, Chile and Uruguay), plus Cuba, which moved up from a midway position to an advanced one. This category also includes the ex-colonies of the United Kingdom which have recently become independent.^{1/} Obviously, analogies cannot be drawn between these two categories as regards economic structures; the progress of literacy must be related to the existence of projects which, quite apart from other aims, gave very high priority to integration into a set of values, whether these were political or designed to create a sense of national identity or to modernize society.

^{1/} Because of their particular situation and the lack of certain data, these countries are not considered systematically in this paper.

Table 1
LATIN AMERICA: ILLITERACY LEVEL BY COUNTRIES AND AGE GROUPS

| Country | Illiteracy level 1960 | Illiteracy rates | | | |
|--------------------|--------------------------|----------------------|--------------------|-------------------|------|
| | | 15 and over | | 15-19 age group | |
| | | 1960 | 1950 | 1960 | 1950 |
| | <u>-10%</u> | | | | |
| Argentina | | 8.6 | 12.8 _{a/} | 5.0 | 8.3 |
| Barbados | | 1.8 | | | |
| Cuba | | 3.9 _{b/ g/} | 22.1 _{d/} | | 22.5 |
| Uruguay | | 9.6 _{e/} | | 2.4 | |
| | <u>-20%</u> | | | | |
| Costa Rica | | 15.6 _{a/} | 20.6 | 8.6 | 18.4 |
| Chile | | 16.4 | 19.6 _{f/} | 9.4 | 13.9 |
| Chile | | 11.7 _{g/} | | 4.0 _{g/} | |
| Jamaica | | 18.1 | | 9.3 | |
| Guyana | | 12.9 | | | |
| Trinidad-Tobago | | 11.3 | | | |
| | <u>-30%</u> | | | | |
| Colombia | | 27.1 _{h/} | 37.3 _{i/} | 17.5 | 31.4 |
| Panama | | 23.3 | 30.1 | 12.7 | 20.4 |
| Paraguay | | 25.4 _{j/} | 34.2 | 13.2 | 22.7 |
| | <u>-40%</u> | | | | |
| Brazil | | 39.4 | 50.5 | 33.4 | 47.2 |
| Ecuador | | 32.5 _{k/} | 44.2 | 20.2 | 34.7 |
| Mexico | | 34.6 | 42.5 _{l/} | 25.9 | 42.5 |
| Peru | | 38.9 _{m/} | | 26.2 | |
| Dominican Republic | | 35.5 | 56.8 | 17.4 | 46.7 |
| Venezuela | | 36.7 _{n/} | 49.0 | 25.3 | 42.6 |
| | <u>-40%</u> | | | | |
| Bolivia | | | 67.9 | | 57.3 |
| El Salvador | | 51.0 _{b/} | 59.0 | 39.3 | 55.6 |
| Haiti | | | 89.3 | | 86.4 |
| Honduras | | 55.0 _{b/} | 64.8 _{l/} | 45.7 | 64.8 |
| Guatemala | | 62.2 _{h/} | 70.6 | 56.4 | 68.0 |
| Nicaragua | | 50.2 _{e/} | 61.6 | 44.9 | 61.4 |

a/ 1947.

b/ 1961.

c/ This calculation seems to have been based on the number of illiterates in relation to the total population of the country.

d/ 1953.

e/ 1963.

f/ 1952.

g/ Anticipated result of the 1970 census.

h/ 1964.

i/ 1951.

j/ 1962.

k/ 6 and over.

l/ 10 and over.

/The trend

The trend of the illiteracy rate in the 15 to 19 age group shows that mass education continues to be unable in most Latin American countries - or was until very recently - to reach the youngest part of the population; this is even more serious than the fact that illiteracy rates are pushed up by the adult and old population. In ten countries around 1960, including the two with the largest populations, at least one out of every four 15 to 19 year olds remained illiterate, while the country with the largest population in Latin America only reached a rate of two literates out of three in the same age group.

Around 1960, only three countries - Argentina, Cuba and Uruguay - with the later addition of Costa Rica and Chile, had managed to bring their total young population into a state of literacy, with the gap between them and the educationally less developed countries ranging from a ratio of one to five to a ratio of one to twenty.

Table 2 relates the state of literacy in some European countries about 1850 and 1900 with the rate of urbanization in cities of more than 20,000 inhabitants in 1920. It also shows the situation of some of the most heavily populated countries of Latin America with the highest rate of illiteracy in 1960, and relates this to the rate of urbanization. It is useful to make this comparison with the European countries in order to assess the relationship between the growth of literacy and economic development in different social structures at different periods.

In the growth of the European literacy rate, the following situations are found:

- (a) Countries with low urbanization rates and low literacy rates.
- (b) Countries with high urbanization rates and high literacy rates.
- (c) Countries with low urbanization rates and the highest literacy rates.

These three situations more or less sum up the interrelation between the growth of literacy and economic development on the one hand, and between the growth of literacy and social values that generate demands unrelated to the demands of the economic system, on the other.

The development of the trading economy, followed by that of the industrial economy, made it indispensable for labour employed in non-agricultural activities to have a minimum standard or level of knowledge

Table 2

URBANIZATION AND ILLITERACY IN SOME EUROPEAN AND LATIN AMERICAN COUNTRIES

| Country | Level of urbanization in 1920. | Adult illiteracy b/ | | Year | Age group | Rate of illiteracy b/ | Level of urbanization about 1960. | Illiteracy 15 and over |
|---------------------------|---|---------------------|-------|------|-------------|-----------------------|---|------------------------|
| | Cities of more than 20 000 inhabitants a/ | Census of the year | Rate | | | | Cities of more than 20 000 inhabitants c/ | |
| United Kingdom | | | | | | | | |
| (Scotland) | | | 20 | | | | | |
| (England and Wales) | 64 | 1851 | 30-33 | | | | | |
| France | 37 | 1851 | 40-45 | 1901 | 5 and over | 18 | | |
| East Germany | 40 | | | | | | | |
| (Prussia) | | 1849 | 20 | 1871 | 10 and over | 12 | | |
| Poland | 18 | | | | | | | |
| Belgium | 49 | 1856 | 45-50 | 1900 | 10 and over | 19 | | |
| Sweden | 23 | 1850 | 10 | | | | | |
| Austria | 36 | | | | | | | |
| (Austro-Hungarian Empire) | | 1851 | 40-45 | 1910 | 10 and over | 17 | | |
| Hungary | 32 | | | | | | | |
| Spain | 26 | 1857 | 75 | 1910 | Over 10 | 50 | | |
| Brazil | | | | | | | 28.1 | 39.4 |
| Colombia | | | | | | | 36.6 | 27.1 |
| Mexico | | | | | | | 29.6 | 34.6 |
| Venezuela | | | | | | | 47.3 | 36.7 |
| Peru | | | | | | | 28.9 | 38.9 |

a/ United Nations: Growth of the urban and rural population in the world from 1920-2000, Table 45.

b/ Carlos Cipola: Educación y desarrollo en Occidente, 1770, Tables based on national census.

c/ United Nations: Estadío económico de América Latina, 1963.

in order to be able to carry out their functions. On the other hand, the demand for literacy programmes in the agricultural sector before the beginning of the twentieth century was almost nil, since most of the skills needed in agricultural work were learnt at home, and involved acquiring the kind of experience that could be transmitted verbally without the need for technical knowledge or the ability to analyse complex processes.

A line of demarcation can be drawn, however, between literate and non-literate areas which does not correspond to degrees of urbanization or industrialization, but to cultural areas that gave high or low priority to improving literacy quite irrespective of whether this would be economically productive.

The limits of this paper do not allow of an exhaustive discussion of the role played by religious and political values in the literacy process. Suffice it to say that one of the most important forms of communication between man and God in the Protestant religion is the reading of His word as enshrined in the Bible; while in the Jewish religion, knowledge of the sacred books, was the highest conditions for man's fulfilment as a religious being. With respect to political values as promoters of literacy, there are precedents far back in the past, starting with the medieval communes when citizenship was established in the charter of liberties of the city, and the obtaining of successive liberties was largely linked to the growth of written law under the patronage of the monarchs. In the nineteenth century, the struggle for political rights necessarily implied raising the literacy rate. A citizen was a person who paid a certain amount in taxes, i.e. he was involved in the bureaucratic machinery of controls and was capable of coming to terms with it. Chartism in England, which called for an extension of citizens' rights, was not only a mass movement but also made many petitions to Parliament, containing millions of signatures demanding the right to vote. Lastly, mention must be made of the role played by the trade unions and working-class parties in bringing literacy to the masses as a pre-condition for ideological indoctrination and access to voting rights.

The drop in illiteracy is the result of a complex of social factors, including economic development; but economic development has generally not been the prime mover, and in some cases has had a very minor role. Its

/impact has

impact has come when industrialization is in its advanced stages. The first country to reduce illiteracy to a minimum, namely Sweden, clearly did so as a result of religious and political values, and not because of the demand for skilled labour generated by an industrial economy, since Sweden did not possess an industrial economy until half a century after illiteracy had virtually been eradicated.

The fact that illiteracy in Latin America has persisted must, therefore, be placed in a different context from that of simple relations between rates of urbanization and industrialization which, while they may show up certain structural conditions, are too static and fragmentary to reveal all the social facets of the problem.

We can summarize this topic in the following propositions:

(a) Where illiteracy has been eradicated in Latin American countries, this has been the result of policies initiated in the nineteenth century to which high priority was assigned for supraeconomic values, and not because there was a need for skilled labour. Important among these values were the desire for national integration, particularly necessary in countries formed by international migration, and the aim of transforming a political system in which participation was only formal into a system in which the members, theoretically at least, would be capable of full participation. This meant that literacy programmes were directed towards the modernization of social systems rather than economic development; the latter may have been borne in mind, but always subordinated to the higher aims of what was then referred to as "civilization".

(b) In the case of societies which succeeded in making considerable inroads into illiteracy rates, participation, national integration and socialization within a set of values, again became the driving force behind literacy policies in the second half of the twentieth century.

(c) Conversely, the drop in illiteracy in other countries is closely correlated to the variables of economic growth, especially urbanization, industrialization and the development of the modern services sector. This correlation explains the gradual increase in literacy and the large discrepancies between rural and urban areas, and within urban areas the disequilibria stemming from differences in population density and the degree of social differentiation.

/(d) For

(d) For Latin America in general, literacy programmes were not assigned very high priority in practice; if they had, responsibility for the education of the masses would have been taken on by autonomous social groups who of their own volition would have carried most of the burden of improving literacy, as happened in some European countries and in the United States in the nineteenth century. In nearly every case, the State was expected to organize literacy campaigns. No groups or parties, not even those which ascribed high priority to the electoral process and its legitimation, took on the task of raising literacy or made any really effective contribution to literacy campaigns, despite the fact that it was essential to make individuals literate in order to transform them into citizens.

(e) Because of the attitude that the State bore sole responsibility for literacy programmes and that such programmes must be carried out through institutionalized channels, the process was limited by certain factors: (i) Considerable economic resources were required to sustain an institutionalized process; (ii) The scope of literacy programmes was limited to what was considered necessary by the groups in power, and as long as other traditional forms of political control remained in existence - paternalism, bossism, or simple exclusion - literacy was not regarded as essential to the operation of the political system; (iii) The literacy process implicitly became a variable dependent on the human resources needed for economic development, and since very few countries have so far succeeded in incorporating their entire labour force into modern production, it was not necessary to make literates out of masses that were not essential to the functioning of the prevailing economic system.

(f) On the other hand, however, the fact that the State assumed full responsibility for literacy programmes meant that, in some societies, the process did not end when the members of those social groups capable of participating in the benefits of economic development were able to read and write. The rural literacy campaigns in some countries have owed their existence to the perseverance of the State in a milieu which, in terms of labour demand, does not need literates, and which lacks social groups capable of putting pressure on the authorities to obtain services or even

/of conceiving

of conceiving of a social condition other than the passive condition to which they are accustomed.

(g) The eradication or substantial reduction of illiteracy is theoretically feasible as far as human and economic resources are concerned provided that literacy campaigns are not limited to the institutional front. However, this is dependent on the degree to which the power centre is capable of mobilization and of transmitting the urgency of the objective to the educated social groups that are capable of providing literacy workers and that necessarily belong to the middle and upper classes. Do these groups, or might they, feel motivated to carry out this task? Or is their lack of interest in the literacy process simply an expression of their lack of interest in bringing a degree of homogeneity into education that would seriously affect their position as a class? These questions will be considered and discussed in the sections that follow.

2. Educational levels

The next topic to be considered concerns the question of access to a system of formal education and the organization of regular classes for the part of the younger population that has been able to complete at least a primary education.

The countries were selected on the basis of the scale of illiteracy shown in the tables and other available information as fairly typical examples of some of the different levels of education in Latin America.

UNESCO considers that a person is literate when he has completed four years of primary education in a regular school system. This is the minimum length of time for mastering the techniques of reading and writing and being able to do simple calculations; it is considered that a person who has reached this stage is not very likely to relapse into illiteracy and that this basic level of education equips him for further training and enables him to adapt to different types of social and working relationships.

Under this definition, one to three years of schooling is not enough for total literacy. It is worth considering, however, whether the education a child receives in four years, looked at in terms of the growing intellectual demands of contemporary society, is very much different from the kind of

/education received

education received by someone in the father's generation who was barely literate. In other words, the question is whether it is legitimate to use certain educational levels for purposes of comparison as if they were of constant value. The goal of literacy, which had a definite value in a pre-industrial society, has less value in an industrial society, and practically no value at all in a post-industrial society. It is possible to define the minimum level a person must reach in each of these types of society in order to be able to participate in the system and not remain marginal to it. The requirements for fulfilling occupational roles and for participation in an even more complex social system are growing as the social structure as a whole becomes more complex and intellectualized, hence what constitutes the minimum level is relative to the stage of development of each society. A detailed study would permit us to establish the basic level at which participation is possible with a fair degree of accuracy; however, in default of this, it is quite clear that, within the urban and industrial society of Latin America, a person with a basic education consisting in less than four years schooling is in the same position as the illiterate in the early 1900s, when Latin America was rural and pre-industrial. In this paper, therefore, those with insufficient schooling are included with those outside the educational system in a group that is potentially marginal to the contemporary social process and that will probably become more marginal as time goes on, unless there are large-scale programmes of adult education; the minimum educational level will very probably continue to rise throughout the rest of the century, and those in this group will continue to have a reasonable expectation of an active life of about forty years.

One last point on this subject concerns what is actually transmitted in the same period of study at different stages of development. As the planned duration of study courses has gradually increased, the practice of transmitting and implanting a fixed amount of knowledge in a short time has been replaced by slower techniques of education which have more positive results at the upper levels of the course, with time to spare for development of the personality, self-expression and education in a greater number of areas.

/Hence, if

Hence, if a course plan is of comparatively longer duration, it may be assumed that those pupils who drop out after the first three years, for example, are relatively less qualified than those who finish a course planned to last three years.

Table 3 shows that around 1960 only two countries had managed to incorporate the entire school-age population into the regular system; that another two educationally advanced countries were nearing this goal; and that about one-fifth of the children in countries at an intermediate level of educational development were outside the school system, while in the less educationally developed countries this percentage was about one-half.

Taking the "No education" and the "One to three years primary education" as a group, the table shows that, even in the advanced countries, between one-sixth and one-quarter of the school-age population is below the minimum level; this figure rises to one-half in countries at an intermediate level of development, and is about 80 per cent in Guatemala, for example, which is one of the less educationally developed countries.

Access to the final stages of primary education continues to be difficult for many of the peoples of Latin America, and, as will be seen later, in the great majority of Latin American countries, including those most educationally advanced, less than half the children completed their primary education.

Conversely, it is noteworthy that a high percentage of the 15 to 19 year age group are registered in or have completed a course in secondary and/or higher education. Of course there is a large gap between Uruguay and Guatemala - or Chile with its provisional figures for 1970 - which mark the top and bottom of the scale, but it is interesting to note that the remaining countries are much closer as regards the rates for secondary and higher education than they are with respect to the minimum level of education. If there is one factor making for homogeneity in education in Latin America, it is the high rate of post-primary schooling, despite the enormous differences between countries as regards providing the population with the minimum educational level.

Table 3

EDUCATIONAL LEVELS IN SOME AGE GROUPS

| Countries | I. 15 to 19 age group | | | | |
|-------------------------|------------------------|-------------------------------|---------|---------------------------------|----------------------------|
| | No edu cation a/ | Primary 1 to 3 years b/ | 3 = 1+2 | Primary 4 to 6 classes c/ | Secondary and higher |
| Argentina d/ | 4.0 | 15.3 | 19.3 | 53.1 | 31.6 |
| Uruguay e/ | 2.1 | 13.8 | 15.9 | 46.1 | 38.0 |
| Chile d/ | 9.4 | 18.2 | 27.6 | 40.1 | 30.8 |
| Chile f/ | 2.8 | 13.7 | 16.5 | 30.1 | 51.6 |
| Costa Rica e/ | 8.6 | 28.7 | 37.3 | 43.0 | 19.7 |
| Colombia g/ | 17.5 | 38.1 | 55.6 | 24.1 | 20.3 |
| Mexico h/ (15 to 29) | 22.3 | 25.8 | 48.1 | 34.5 | 17.4 |
| Guatemala g/ | 59.4 | 20.0 | 79.4 | 14.2 | 6.4 |

II. 20 to 24 age group

| Countries | No edu cation a/ | Primary 1 to 3 classes b/ | 3 = 1+2 | Primary 4 to 6 classes c/ | Secondary 1 to 3 | Secondary 4 and over | Higher |
|------------|------------------------|---------------------------------|---------|---------------------------------|---------------------|----------------------------|--------|
| | | | | | | | |
| Argentina | 4.4 | 11.2 | 15.6 | 57.9 | 10.6 | 10.3 | 5.6 |
| Uruguay | 3.3 | 17.1 | 20.4 | 45.7 | 13.1 | 16.4 | 4.4 |
| Chile | 11.6 | 18.0 | 29.6 | 37.9 | 14.9 | 12.4 | 2.6 |
| Chile f/ | 4.3 | 16.2 | 20.5 | 32.0 | 21.9 | 16.7 | 6.6 |
| Costa Rica | 12.7 | 31.4 | 44.1 | 37.9 | 7.8 | 5.7 | 4.5 |
| Colombia | 20.0 | 37.5 | 57.5 | 24.5 | 10.6 | 5.6 | 1.8 |
| Guatemala | 62.3 | 19.3 | 81.6 | 12.4 | 2.8 | 2.5 | 0.7 |

a/ The figures for Colombia indicate illiteracy and those for Uruguay include that part of the population which completed the first year of primary schooling.

b/ In Uruguay, the figures are estimates since the information from the census only gave the classifications "primary not completed", one to five years, and "primary completed".

c/ The figures for Colombia are for four or five years of official schooling. For Chile, the extension of primary schooling to eight years is not taken into consideration.

d/ 1960 census.

e/ 1963 census.

f/ Anticipated result of 1970 census.

g/ 1964 census.

h/ 1970 census.

/Argentina and

Argentina and Colombia, for example, show this pattern very clearly. In Argentina, 19.3 per cent of the population is below the minimum educational level and 31.6 per cent is in secondary or higher education; while in Colombia 55.6 per cent is below the minimum level and yet 20.3 per cent of the 15 to 19 age group is receiving secondary education.

An analysis of the 15 to 19 age group also the 20 to 24 age group can help to distinguish certain typical cases characteristic of several Latin American countries.

(a) The first case is that of the countries which have reduced the number of those who achieve no more than the minimum educational level to a proportion ranging between one-sixth and one-quarter, and have raised the percentage of those who complete between four and six years of primary schooling to about 50 per cent of the total, with at least one-third going on to post-primary studies, generally lasting more than nine years.

(b) The second case comprises those countries whose young population is distributed roughly in thirds: one-third without schooling or with up to three years of primary education; one-third having passed the minimum level and completed from four to six years of primary education; and one-third engaged in a longer course of education, for the most part lasting more than nine years.

(c) The third case comprises countries in which about 50 per cent of the young population remain at the minimum level, but with the characteristic that only 25 per cent of the other half stop on completion of their primary education, while the other 25 per cent goes on to secondary and higher education. This puts these countries in a position which is not very different from that of the most advanced countries as regards the coverage of secondary education.

(d) The fourth case comprises those countries in which between three-quarters and four-fifths of the population do not manage to go beyond the minimum educational level, with a small proportion of children reaching the final years of primary school and an even smaller proportion reaching secondary education.

3. Comparison with European societies in the past

The educational structure of Latin America around 1960 can be summed up by saying that between 15 and 80 per cent of the young population, depending in the country, was outside the educational system or below the minimum educational level, while enrolment in secondary education, including courses lasting more than nine years, has expanded - the 1970 rates show an enormous increase - to include a very considerable percentage of those theoretically eligible for it. In other words, the peculiarity of the educational system in Latin America has been its inability to create a course of strictly basic education going above the minimum level necessary for the integration of the individual into contemporary society and covering the whole of the school-age population. Although this goal has not been achieved, secondary and higher education in Latin America have been developed to a point where they include percentages of the eligible population that are comparable and in some cases superior to those of the developed countries.

There are no precedents for this kind of educational structure in the history of what are now the developed countries today, nor can it be compared with the prevailing structure in such countries. The structure of education in Latin America - even in those countries that have made most progress as regards modernization and development - is a unique phenomenon which is closely related to the characteristic features of social structures originating in underdevelopment and dependency.

The first step in analyzing this phenomenon is to look at the educational profile in some of the developed countries - although not the most highly developed, since comparison with the highly industrialized countries might lead to distortions - as revealed in their oldest and youngest generations. For the older generations, it would have been advantageous to have information from censuses taken around the beginning of the century, showing the educational structure of the then youngest age groups. Since these are not available, the 1960 censuses have been used for information on the level of education of persons in the oldest age groups, whose educational level corresponds to that prevailing at the beginning of the century.

/It is

It is assumed that persons of 65 and over in 1960 had the same educational level that they acquired around 1900 and before, since, as is well known, adult education programmes have for the most part not substantially changed the levels of education acquired by each age group when at school. Although it should be borne in mind that the proportion of literates is probably greater among the survivors in 1960 than it was in the whole generation, the figures are such that the above assumption in no way affects the validity of the following points.

The countries chosen (see table 4) were not highly industrialized; in fact in some of them industrialization began after or during the First World War. This is particularly true of Canada and Italy; in Holland, there is a highly developed artisan-type and manufacturing sector, while in both Hungary and Poland agricultural activity predominated until well on in the twentieth century. Canada is a very large country in area which had clear difficulties of communication at the beginning of the century, while Holland is a small country. When its oldest inhabitants were school children, Canada had recently become independent (in 1867); Italy too had recently become independent and a unified political entity; while Hungary was part of the Austro-Hungarian Empire, and was the least industrialized and least modernized region within it.

The census information leads to a number of conclusions: (a) In Italy, the country with the lowest educational level, at least 60 per cent of the population completed four or more years of primary education. (For present purposes, "level unknown" counts as without education or below what has been defined as the minimum educational level); (b) In the remaining countries, only Poland shows a significant percentage (20 per cent) of persons without education; more than 60 years ago, the entire population of Holland and Canada was within the educational system; (c) Holland had the whole of its population above the minimum level, Canada, Poland and Hungary five-sixths, and Italy four-sixths; (d) With the exception of Canada - which anticipated what was later to be the very high educational level of the Anglo-Saxon countries of North America - in the other countries less than 10 per cent had completed secondary and higher education.

Table 4

EDUCATIONAL LEVEL IN SOME SELECTED COUNTRIES, BY AGE GROUPS

(About 1960)

| Country | Type of education by number of courses | | | | | | | Total |
|------------------------------|---|----------------|----------------|---------------|----------------|-----------------------|------------------|-------|
| | Without education or less than 1 | Primary | | Secondary | | Higher | Level unknown | |
| | | 1 to 3 | 4 and over | 1 to 3 | 4 and over | graduates | | |
| | | | | | | and non- graduates | | |
| <u>15 to 19 years old</u> | | | | | | | | |
| Canada, 1961 | 0.4 | 1.7 <u>a/</u> | 23.8 <u>b/</u> | 53.1 | 18.4 | 2.6 <u>g/</u> | - | 100.0 |
| Holland, 1964 | - | - | 62.5 <u>b/</u> | 7.0 <u>d/</u> | 0.7 <u>e/</u> | - | 29.8 <u>f/</u> | 100.0 |
| Hungary, 1960 | 1.4 | 1.5 | 75.7 | 15.8 | 5.2 <u>g/</u> | 0.4 | 0.0 | 100.0 |
| Italy <u>h/</u> , 1964 | - | - | 64.1 <u>i/</u> | 25.6 | 3.4 | 0.0 | 6.9 | 100.0 |
| Poland <u>j/</u> , 1960 | - | - | 60.4 <u>k/</u> | 0.8 <u>l/</u> | 38.1 <u>m/</u> | 0.2 | 0.2 | 100.0 |
| <u>20 to 24 years old</u> | | | | | | | | |
| Canada, 1961 | 0.6 | 2.5 <u>a/</u> | 25.8 <u>b/</u> | 37.4 | 24.0 | 9.7 <u>g/</u> | - | 100.0 |
| Holland, 1964 | - | - | 77.8 <u>b/</u> | 13.4 | 3.5 | 0.2 | 5.1 <u>f/</u> | 100.0 |
| Hungary, 1960 | 1.9 | 2.6 | 73.9 | 5.0 | 13.1 | 3.5 | 0.0 | 100.0 |
| Italy <u>n/</u> , 1964 | - | - | 65.5 | 14.8 | 10.5 | 0.3 | 8.9 | 100.0 |
| Poland <u>o/</u> , 1960 | 0.4 | - | 61.1 | 6.3 | 28.7 | 3.3 | 0.2 | 100.0 |
| <u>65 years old and over</u> | | | | | | | | |
| Canada, 1961 | 4.8 | 16.9 <u>a/</u> | 46.6 <u>b/</u> | 18.0 | 9.5 | 3.9 <u>g/</u> | 0.3 | 100.0 |
| Holland, 1964 | - | - | 95.3 <u>b/</u> | 2.2 | 1.2 | 0.1 | 1.2 <u>p/</u> | 100.0 |
| Hungary, 1960 | 8.3 | 9.1 | 76.7 | 1.1 | 2.7 | 2.0 | 0.1 | 100.0 |
| Italy, 1964 | - | - | 50.5 | 3.9 | 2.6 | 1.1 | 41.9 | 100.0 |
| Poland <u>q/</u> , 1960 | 20.1 | - | 68.0 | 1.3 | 8.4 | 1.9 | 0.3 | 100.0 |

Sources: Canada: United Nations, Demographic Yearbook 1963.

Holland: United Nations, Demographic Yearbook 1964.

Hungary: United Nations, Demographic Yearbook 1963.

Italy: United Nations, Demographic Yearbook 1964.

Poland: United Nations, Demographic Yearbook 1963.

a/ Includes persons having completed the first four years of primary schooling.

b/ Includes persons having completed 5 or more years of primary schooling.

c/ Includes persons with a university degree.

d/ Includes persons having completed their secondary education at the intermediate level, and also those who have completed three years of general secondary education.

e/ Includes persons having completed general secondary education.

f/ Includes persons who are still studying and have not completed any level in their respective branch.

g/ Includes persons having completed general secondary education with the fourth year.

h/ Includes the age group 14 to 20.

i/ Includes all persons with a primary certificate.

j/ Includes the age group 14 to 17.

k/ Includes persons having completed 7 years of primary education and those who went to school without completing the course.

l/ Includes persons having completed secondary education at the intermediate level of 2 to 3 years, where this does not constitute a basis for higher studies.

m/ Includes persons having completed secondary education of 4 to 5 years, where this is a basis for going on to higher education. It also includes persons who go on studying and those who have stopped studying but without completing their secondary education.

n/ Includes the age group 21 to 24.

o/ Includes the age group 18 to 24.

p/ Includes persons with an unknown level of education, appearing in the census in the age group 25 and over.

q/ Includes the age group 50 and over.

/In countries

In countries where agricultural and artisan-type activities predominated and which were at intermediate or low intermediate level of development, the educational system around 1900 normally covered nearly all the population with basic schooling lasting at least four years. This gave the national population a homogeneous level of education within a cultural pattern that was above what is now defined as the minimum educational level. Secondary and higher education, however, was developed only to the extent required to train the governing elites.

The widespread introduction of elementary education to cover all, or nearly all, the school-age population was predominantly due to political and cultural values, for education was expected to yield political and social benefits. According to Jorge Graciarena, the expansion of education was visualized as an indispensable instrument for broadening the reasoning capacity of the people,^{1/} this latter phrase appropriately summing up the educational policy of European countries nearly a century ago.

The century of rationalism, of democratic ideologies, of romanticism with its idealized view of that indefinable group known as the people, of the construction of national societies transcending the barriers of language and history through the fusion of variegated regional cultures, viewed education as the means of achieving the different social values around which its ideologies were organized. The socialist ideologies, too, believed in education as the sine qua non for achieving their aims. The great difference was that, for Marxism in particular, the point was not to educate within any set of values but to educate in order to support and create a proletarian culture whose values were opposed to bourgeois values.

It is very interesting to note how, for different motives and with different expectations, the opposing social and ideological groups coincided in their support for general elementary education of the masses.

This stemmed from their desire to obtain the consensus of the masses on a particular set of values. The traditional methods of social control had entered a critical phase as a result of profound structural changes - particularly pronounced in the most developed societies, but equally prevalent in other European societies, at the ideological level at least -

^{1/} "Desarrollo, educación y ocupaciones técnicas", in América Latina, year 12, N° 1.

the alternative being to obtain a new consensus of opinion through disseminating values within an institutionalized educational system. While this approach was quite logical in societies where the bourgeoisie had come into power and needed to transmit its own set of values, it was just as necessary for societies wishing to maintain a status quo that was threatened by the atmosphere of change in Europe. With the exception of the most traditional societies, which had not yet initiated a process of structural change, societies needed education if only to integrate the population into new national states, or to secure allegiance to existing monarchical political systems.

The search for a new system of social control through education coincided with the extension of political participation, and the appearance of the popular press. The anti-status quo movements and the social groups supporting them set themselves up as the ideologues of mass education, and hoped that by extending education, they would obtain the electoral or ideological base they needed in order to triumph.

Lastly, many social groups agreed that the legitimacy of systems depended on a consensus of the citizens; and the concept of citizenship could only be made fully effective through mass education.

Had the education of the masses depended on the demand of the economic system for skilled labour, it would never in any society have covered the whole population. Even in the most industrialized societies of the period, there were a myriad activities which did not require even a basic education. However rational and farsighted the labour training programme, the inevitable conclusion was that investment in education for all was neither profitable nor necessary. Furthermore, basic primary education for all was not called for by all social groups as a means of participation or mobilization, and in the specific case of the peasantry, it was necessary for the State to lay down the form such education should take, with strong sanctions for non-compliance.

The skills required of labour to enable the most advanced sectors of the economic system to operate were relatively broad, and could be supplied by a basic training such as that given by primary education. Another feature was that there was very little professional differentiation in what was

/required in

required in the way of intellectual formation or the development of intelligence: an artisan, an administrative official, a skilled industrial worker, or a gunner required more or less the same intellectual type of academic training, followed by an apprenticeship in the specific techniques of the job that took place in the enterprises or organizations where he began work. A third feature was that the initial stage of industrialization had a detrimental effect on the demand for skilled labour, because this meant that functions previously carried out by a single artisan were now broken down into several simple mechanical operations.

The effect of the initial stage of industrialization was to reduce the number of artisans without at the same time creating intermediate occupations requiring a high level of skill within the new industrial process. This feature, which has been made much of in social theory, especially in Marxist theory on the decline of the independent middle classes, had an impact on education. The shrinking of the artisan-type labour market reduced the demand for persons with a primary level of education, this being the necessary basis for subsequent apprenticeship in artisan-type techniques; while on the other hand, the labour force which industry began to recruit in its initial stages normally had a minimum of education and lacked know-how in empirical methods; furthermore, the proportion of salaried employees and administrators to wage workers was very low and by no means replaced demand for persons with the level of education common to the artisan.^{1/}

In the later stages of industrialization, this type of relationship basically changed since the growth of technology required labour with the intellectual training needed as a basis for specialized training, and the

^{1/} Carlos Cipolla, in Educación y desarrollo en Occidente (Barcelona, 1970), p. 83, notes that England undeniably employed a large number of illiterate or semi-illiterate children or young people in factories, to its great advantage and profit; and that the first stage of industrialization did not achieve a substantial level of fixed capital or even high-level human capital formation. On the other hand, he states that, in that it offered better opportunities of employment for children and young people, the Industrial Revolution increased the opportunity cost of education, and in consequence had a negative influence on the demand for it. Thus, in England up to the middle of the nineteenth century, education for the people was at a standstill, while the economy expanded and wealth increased.

ratio between manual labourers and technical and administrative personnel was modified, resulting in demand for persons with a longer period of academic education.

Although the demands of economic expansion cannot suffice to explain the early spread of basic education, it is possible to relate the reduction in the coverage of post-primary education to the lack of any need for personnel with advanced education to fulfil economic roles. Thus, secondary and higher education advanced only to the extent absolutely necessary to provide differentiated and exclusive training for national élites and their immediate cadres.

The educational systems of the countries under consideration began to develop after this initial degree of homogeneity had been achieved, and the number of years or classes completed by the school-age population as a whole slowly rose. Taking the 20-24 and 15-19 age groups in Table 4, it is found that the progress of education can be broadly summed up as follows: (a) The complete disappearance of persons with no education or not having completed the primary or basic course. (b) Between two-thirds and three-quarters of the population finish their education with the basic primary course, which lasts from 5 to 8 years, with the exception of Canada, where only one-quarter of the population of the younger age groups stops at the primary or basic level. (c) Secondary education is beginning to be considered a part of basic education, but the percentages of the population covered in each age group are still not particularly high. Within secondary education a distinction can be made between a compulsory total course lasting eight, nine, or ten years, and a course with a low level of coverage following the basic course. (d) Higher education has a low degree of coverage, not only in relation to the most advanced countries in this respect - such as the United States and Canada - but also in relation to those Latin American countries in which higher education has the broadest coverage (see table 3).

4. Comparison with present-day European societies

A synchronic comparison with the developed countries also shows that there are qualitative differences in the educational structure, and consequently the expansion of secondary education, although certain quantitative indicators might make it appear that the structures are comparable.

Table 5 and 6 give the rates of enrolment by year of age in primary and secondary education in the Latin American and European countries for which data are available and which are at different stages of economic and social development. The data cover the latest year for which information is available on each country, ranging between 1966 and 1970.

A series of comparative data can be obtained from the tables, which can be summed up as follows:

(a) In all the European countries under consideration, virtually 100 per cent of the population between 7 and 11 years old are in the educational system, while in only two Latin American countries - Argentina and Uruguay - are more than 90 per cent of this age group in school; in Chile, Cuba and Mexico the figure is above 80 per cent, while the remaining countries it is below that level, ranging down to Nicaragua where only about 50 per cent of children between 7 and 11 years old are enrolled in the educational system.

(b) At the age of 11, all children in all the systems should be enrolled in educational establishments, since this age falls within the period of compulsory education and corresponds, discounting repeat years, to the fourth, fifth or sixth year according to the system, or in other words to the courses immediately above what is considered the minimum educational level. In Europe the enrolment rate for this age is over 96 per cent, except Spain with 94.6 per cent and Italy with 92.3 per cent. In Latin America, the rates of Argentina and Uruguay are similar to those of Italy; Chile and Mexico have 83 per cent of their 11 year old children in school; Cuba, Venezuela and El Salvador rather more than 70 per cent, Colombia 64 per cent and Nicaragua 58 per cent.

(c) In Europe, with the exception of three countries, more than 90 per cent of the 13 year old population is still in school; the proportions in Latin America are Uruguay 83 per cent, Argentina and Cuba over 70 per cent, Chile and Venezuela over 60 per cent, and the other countries under consideration well below 60 per cent. This means that at age 13 the proportional difference between Latin America and Europe is very pronounced.

Table 5

RATE OF ENROLMENT BY YEAR OF AGE IN FIRST AND SECOND GRADE (GENERAL)

| Countries | | Ages | | | | | | |
|-------------------------|-----------|------|------|------|------|------|------|------|
| | | Year | 7 | 9 | 11 | 13 | 15 | 17 |
| Austria | Total | 1967 | 100 | 98.0 | 100 | 92.2 | 28.6 | 9.0 |
| | 1st grade | | 100 | 98.0 | 10.1 | 1.1 | 0.1 | |
| | 2nd grade | | | | 91.5 | 91.1 | 28.5 | 9.0 |
| Belgium | Total | 1966 | 100 | 98.6 | 96.4 | 56.2 | 31.9 | 19.7 |
| | 1st grade | | 100 | 98.6 | 93.6 | 10.6 | 0.3 | - |
| | 2nd grade | | | | 2.8 | 45.6 | 31.6 | 19.7 |
| Bulgaria | Total | 1967 | 100 | 97.4 | 100 | 96.0 | 48.8 | 25.7 |
| | 1st grade | | 100 | 97.4 | 100 | 95.9 | 29.1 | 1.8 |
| | 2nd grade | | | | | 0.1 | 19.7 | 23.9 |
| Spain | Total | 1967 | 92.3 | 92.0 | 94.6 | 72.2 | - | - |
| | 1st grade | | 92.3 | 92.0 | 59.6 | 37.3 | - | - |
| | 2nd grade | | | | 35.0 | 34.9 | 21.2 | 10.4 |
| France | Total | 1966 | 100 | 98.9 | 97.9 | 95.5 | 38.2 | 19.0 |
| | 1st grade | | 100 | 98.9 | 62.3 | 40.6 | 1.0 | 0.1 |
| | 2nd grade | | | | 35.6 | 54.9 | 37.2 | 18.9 |
| Italy | Total | 1966 | 98.6 | 97.3 | 92.3 | 70.1 | 16.6 | 6.8 |
| | 1st grade | | 98.6 | 97.3 | 35.8 | 6.4 | - | |
| | 2nd grade | | | | 56.5 | 63.7 | 16.6 | 6.8 |
| Norway | Total | 1967 | 94.7 | 98.6 | 100 | 98.5 | 83.4 | 35.0 |
| | 1st grade | | 94.7 | 98.6 | 100 | 59.5 | 0.2 | - |
| | 2nd grade | | | | | 39.0 | 83.2 | 35.0 |
| Poland | Total | 1967 | 95.1 | 100 | 100 | 98.4 | 41.0 | 19.0 |
| | 1st grade | | 95.1 | 100 | 100 | 98.4 | 28.3 | 2.7 |
| | 2nd grade | | | | | | 12.7 | 16.3 |
| Federal German Republic | Total | 1966 | 100 | 100 | 100 | 99.4 | 45.4 | 16.4 |
| | 1st grade | | 100 | 100 | 8.7 | 0.5 | 0.1 | - |
| | 2nd grade | | | | 91.8 | 98.9 | 45.3 | 16.4 |
| Sweden | Total | 1966 | 96.8 | 98.8 | 99.8 | 98.1 | 75.9 | 23.2 |
| | 1st grade | | 96.8 | 98.8 | 99.8 | 6.6 | 0.1 | - |
| | 2nd grade | | | | | 91.5 | 75.8 | 23.2 |

Table 6
RATE OF ENROLMENT BY YEAR OF AGE IN FIRST AND SECOND GRADE (GENERAL)

| Countries | | Year | Ages | | | | | |
|-------------------|---------------------|------|------|------|------|------|------|------|
| | | | 7 | 9 | 11 | 13 | 15 | 17 |
| Argentina | Total | 1966 | 95.5 | 97.4 | 92.2 | 72.2 | 40.2 | 23.8 |
| | 1st grade | | 95.5 | 97.4 | 90.5 | 42.4 | 5.9 | 0.4 |
| | 2nd grade | | | | 1.7 | 29.8 | 34.3 | 23.4 |
| Chile | Total | 1967 | 85.9 | 94.0 | 83.8 | 64.8 | 38.1 | 20.3 |
| | 1st grade <u>a/</u> | | 85.9 | 94.0 | 83.8 | 61.4 | 22.3 | 2.2 |
| | 2nd grade | | | | | 3.4 | 15.8 | 18.1 |
| Uruguay <u>b/</u> | Total | 1963 | 88.8 | 94.8 | 91.8 | 83.3 | 39.5 | 22.8 |
| | 1st grade | | 88.8 | 94.8 | 88.9 | 45.5 | | |
| | 2nd grade | | | | 2.9 | 37.8 | 39.5 | 22.8 |
| Cuba | Total | 1968 | 100 | 82.6 | 77.9 | 74.6 | 42.1 | 16.4 |
| | 1st grade | | 100 | 82.6 | 75.7 | 58.4 | 14.5 | - |
| | 2nd grade | | | | 2.2 | 16.2 | 27.6 | 16.4 |
| Colombia | Total | 1968 | - | 70.4 | 69.2 | 55.5 | 20.9 | 17.2 |
| | 1st grade | | | 70.4 | 69.2 | 41.1 | | |
| | 2nd grade | | | | | 14.4 | 20.9 | 17.2 |
| Venezuela | Total | 1968 | 79.5 | 81.9 | 78.2 | 66.1 | 40.8 | 22.6 |
| | 1st grade | | 79.5 | 81.9 | 76.6 | 46.8 | 13.2 | 1.5 |
| | 2nd grade | | | | 1.6 | 19.3 | 27.6 | 21.1 |
| Mexico | Total | 1970 | 88.0 | 91.7 | 82.1 | - | - | |
| | 1st grade | | 88.0 | 91.7 | 82.1 | 48.4 | 23.0 | |
| | 2nd grade | | | | | - | - | |
| El Salvador | Total | 1969 | 61.1 | 72.6 | 71.1 | 58.3 | 38.3 | 26.1 |
| | 1st grade | | 61.1 | 72.6 | 71.1 | 54.8 | 23.5 | 7.4 |
| | 2nd grade | | | | | 3.5 | 14.8 | 18.7 |
| Nicaragua | Total | 1968 | 54.6 | 59.0 | 58.5 | 57.2 | - | |
| | 1st grade | | 54.6 | 59.0 | 58.5 | 50.5 | - | |
| | 2nd grade | | | | | 6.7 | 15.0 | 17.2 |

Source: UNESCO/MINESLA, Table 4.9 - Percentages of the population in each year of age, in first and second grade schooling, both sexes.

a/ First grade includes 7th and 8th year.

b/ Ministry of Public Education, "Informe sobre el estado de educación en Uruguay", (1965).

/(d) However,

(d) However, the situation of the 15 year old population in Latin America where primary and secondary education is concerned is very similar to that of Europe, and in many cases enrolment rates are higher. In Europe, only the Scandinavian countries continue educating more than 75 per cent of this age group; in Bulgaria, France, Poland and the Federal Republic of Germany this figure is about 40 per cent, while in Belgium, Austria, Spain and Italy it ranges, in that order, from 31 to 16 per cent. Of the Latin American countries, Argentina, Chile, Uruguay, Cuba, Venezuela and El Salvador have about 40 per cent of this age group in school, while Mexico, Colombia and Nicaragua have between 23 and 15 per cent.

(e) A peculiar feature is that, with the 17 age group, the ratio between Latin America and Europe is reversed. All the Latin American countries have a higher proportion of this age group still at school than Austria, Spain, Italy, Poland and the Federal Republic of Germany. Chile, Venezuela, Uruguay, Argentina and El Salvador, with proportions ranging between 20.3 and 26.1 per cent surpass all the European countries as regards educational coverage at this age except Norway, Bulgaria and Sweden. In the latter two countries, the proportion is 23 per cent, roughly the same as Argentina; only Norway, with 35 per cent of its 17 age group enrolled has a higher proportion than the Latin American countries.

Taken as a whole, this comparison explicitly reveals two educational systems with different structures. The European countries considered, for all their differences as regards social systems and levels of economic development, have in common the fact that, while basic education is designed for the population as a whole, secondary education is only accessible to a minority.

This structure reflects a social view of education. Broadly speaking, it consists in incorporating the entire population into a basic course of education, and ensuring that this course is accessible to all eligible for it and that there are no drop-outs from it. This course lasts at least six and usually eight years, the length depending on the stage of economic development or the social development policies pursued in each /country. Once

country. Once this general course is completed, the supply of education, and consequently opportunities for any extension of studies, is limited by various factors. In some countries, while the supply of education is limited, there are possibilities for technical training in courses of varying lengths of time, leading to occupational roles at various levels.

A detailed analysis of each country would reveal considerable divergence from this generalization and a great deal of failure to comply with these objectives. It would also show that the enrolment rates do not necessarily correspond to the rates for completion of the basic course by the population as a whole and that there are a number of different time-lags. The question here, however, is not to study the operation of educational systems in each country, but rather to give a broad outline of their structure and social aims.

The educational structure in Latin America reveals a considerable contradiction between the social aims declared and those achieved. The basic feature in common is that the eligible population as a whole does not have access to a basic course of education, while at the same time the supply of general education for the older age groups is considerable and not in line with the lack of coverage by the basic course. The structure reflects an inability to provide the entire population with a homogeneous minimum educational level, together with the gradual growth of extended studies for a social sector that is too large to be considered a social elite. The policies that are reflected in this structure - irrespective of their intentions - actually imply a division of the population into strata depending on whether they have been excluded from or limited to an education which places them below the minimum educational level, whether they have completed a course of basic education, or whether they have the possibility of an extended education which is virtually unlimited, provided they have passed the barrier of primary or basic education.

Although some Latin American countries come close to providing a basic course of education for the entire population, shorter in years than courses in Europe, which distinguishes them sharply from others in the region, all the Latin American countries are at a general fairly

/homogeneous level

homogeneous level since, whatever the percentage of those not entering the educational system or who leave before completing the primary level, in the age groups over 15 the percentage of enrolments is higher than it is in Europe.

5. Performance of educational systems

Looking at enrolment rates by individual years of age is a very useful way of showing the degree of penetration or coverage of the educational system in each age group, but it gives little indication of the performance of the educational system itself. In a country where the repeater rate is very high, pupils may, for example, spend six calendar years completing two or three grades; thus, although given their age they should be close to completing the primary level, in actual fact, because they are over age -- in relation to the grade -- they are certain to drop out without completing the full range of primary education.

Enrolment rates by years of age are very deceptive in Latin America, because they are not closely correlated to the school-leaving rate. The factors behind the difference are late entry, high repeater-rates, and drop-outs returning to school after a break. The combined effect of these indicators of the inefficiency of the educational system is to depress the school-leaver rate below what might be expected from enrolment rates, while high enrolment rates among the 14 or 15 age group -- which would normally mean the completion of an extended study cycle -- in fact are the result of the high rate of repeaters. In Argentina, for example, all school age children of 13 should in theory be enrolled in secondary education -- assuming that a seven-year course is normally completed in eight years, with an average of one repeated year -- and yet 42.4 per cent of all those in the 13 age group remain at the primary level, and only 29.8 per cent have reached the secondary level. This phenomenon is even more pronounced in Colombia, where 41.1 per cent of this age group is enrolled in primary education and 14.4 per cent in secondary education. The situation is even more serious in El Salvador, where the school entry age is six and primary education lasts six years. Assuming an average of one repeated year, all children should have left primary school by the

/time they

time they are twelve; however, 54.8 per cent of the 13 age group level and 23.5 per cent of the 15 age group are still at the primary level. (See table 6.)

The effect of this low performance is that what might be regarded as an educational achievement in El Salvador, for example, has to be qualified by saying that, while an enrolment rate of 38.3 per cent in the 15 age group might appear to denote educational progress, only the enrolment rate of 14.8 per cent in secondary education can be considered as such, since a system that retains 23.5 per cent of its 15 age group in primary education must be regarded as an expensive form of inefficiency.

This discrepancy in the age-grade ratio explains why the enrolment rates by age group for Latin America as a whole are much higher than the school-leaving rates in primary education. Table 7 shows the leavers per 1,000 enrolments in basic or primary education for some Latin American and European countries. The table does not of course include those who did not succeed in entering the system, which means that the leaving rate should not be confused with rate of enrolment of the total eligible population. Generally, in countries with a high leaving rate, only a tiny fraction of children are not enrolled in the educational system; similarly, the countries with low leaving rates show the highest figures for the school-age population outside the system (compare tables 3, 6 and 7).

Only one Latin American country of the thirteen for which data are available has more than six hundred leavers per thousand enrolments in a six-year primary course (Uruguay: 669); two countries have more than five hundred (Costa Rica: 572 and Argentina: 593); two have more than four hundred (Panama: 453 and El Salvador: 433); while the other countries are lower down the scale with Guatemala at the bottom with 253 leavers per 1,000 enrolments.

Conversely, in the European countries for which information is available on the completion of six-year courses, the country with the lowest rate is Yugoslavia with 750, and the country with the highest rate is Sweden with 993 leavers per 1,000 enrolments.

/Table 7

Table 7

FIRST LEVEL LEAVERS IN LATIN AMERICAN AND SOME EUROPEAN COUNTRIES
GROUPS 1960 TO 1970

| Country | Length of cycle (courses) | Relation of leavers per 1 000 enrolments | Leavers after 3rd course | Leavers after 6th course | GNP per capita in 1968 | Degree of urbanization in cities of more than 20 000 |
|----------------------|---------------------------------|---|-----------------------------------|-----------------------------------|------------------------------|--|
| <u>Latin America</u> | | | | | | |
| Argentina | 7 | 543 | 770 | 593 | 857 | 70.7 |
| Brazil | 4 | 356 | 439 | - | 319 | 43.4 |
| Colombia | 5 | 273 | 409 | - | 349 | 43.4 |
| Costa Rica | 6 | 572 | 796 | 572 | 499 | 31.1 |
| Dominican Republic | 6 | 304 | 541 | 304 | 198 | 29.9 |
| Ecuador | 6 | 372 | 579 | 372 | 284 | 31.9 |
| El Salvador | 6 | 433 | 597 | 433 | 313 | 19.4 |
| Guatemala | 6 | 253 | 442 | 253 | 327 | 18.0 |
| Mexico | 6 | 384 | 587 | 384 | 632 | 40.5 |
| Panama | 6 | 453 | 818 | 453 | 619 | 38.2 |
| Paraguay | 6 | 316 | 588 | 316 | 266 | 20.9 |
| Uruguay | 6 | 669 | 879 | 669 | 640 | 66.8 |
| Venezuela | 6 | 394 | 632 | 394 | 731 | 69.4 |
| <u>Europe</u> | | | | | | |
| Bulgaria | 8 | 774 | 975 | 891 | 770 | |
| Czechoslovakia | 9 | 770 | 970 | 921 | 1 240 | |
| Greece | 6 | 933 | 977 | 933 | 740 | |
| Hungary | 8 | 852 | 955 | 911 | 980 | |
| Italy | 5 | 902 | 998 | - | 1 230 | |
| Poland | 7 | 952 | 985 | 964 | 880 | |
| Portugal | 4 | 814 | 909 | - | 460 | |
| Roumania | 8 | 817 | 964 | 877 | 780 | |
| Yugoslavia | 8 | 583 | 966 | 750 | 510 | |
| Sweden | 6 | 993 | | 993 | 2 620 | |

Source: UNESCO, International Conference on Education, XXIIInd session, Geneva, 1-9 July 1970. "The Statistical Measurement of Educational Wastage".

a/ Sources: the data for Latin America are for 1968, and were taken from the document E/CN.12/L.51/Add.2, "Producto Interno Bruto de los países de América Latina", Part II, 1 October 1970.

For Europe they were taken from "World Bank ATLAS, population, per capita product and growth rates", published by the International Bank for Reconstruction and Development, 1970.

If educational performance is measured solely by the number of children who finish the third year of primary or basic education, the European countries range from the minimum in Portugal, with 909 leavers in the third year out of 1,000 enrolments in the first year, and a maximum in Italy with 998 leavers. Among the cohorts who finished in the 1960s in Latin America the figures are the following: over 800 leavers, Uruguay (879) and Panama (818); between 700 and 800 leavers, Costa Rica (796) and Argentina (770); between 600 and 700, Venezuela (632); between 500 and 600, El Salvador (597), Paraguay (588), Mexico (587), Ecuador (579) and the Dominican Republic (541); and with less than 500 leavers, Guatemala, Brazil and Colombia.

These data reveal another facet of the special structure of education in Latin America. The enrolment rates by year of age show a considerable effort, in both human and economic resources, to bring school attendance into line with the situation in Europe; but whereas the yield on investment in most of the European countries considered, in terms of the school-leaving rate, is almost 100 per cent for the third year and about 90 per cent for the sixth year, in only three Latin American countries is the figure above 50 per cent for the sixth year, while the rest are below, and well below, this figure.

Despite this considerable difference, as shown above, enrolment of the 17 age group in secondary education in most Latin American countries is equal to and higher than the rate achieved in Europe.

Access to secondary education in the countries under consideration, although apparently based on academic criteria, masks a selection based on differences in social class and stratum. This has been demonstrated by a considerable amount of empirical research. However, the great difference between European and Latin American countries derives from the fact that, since the former have managed to provide the entire population with a basic education, the conditions of selection are less class-bound than they are in Latin America, and there are broader opportunities for upward mobility and the recruitment of talent.

6. Education, urbanization and income

Table 8 presents the level of urbanization in the different countries - in terms of population living in cities with over 20,000 inhabitants - in relation to the level of education of the population aged 15 to 19 years.

The 15 to 19 age group was chosen as the one which has seen the most recent action in the educational field, and the level of urbanization in cities of 20,000 inhabitants and over because these cities are genuinely urban units with a real influence on the demand for education.

The positions with the lowest and the highest level of education are occupied by countries which are also at opposite ends of the scale as regards level of urbanization. In Haiti, with an urban population of 5.1 per cent in 1950, 86.4 per cent had no formal education; while in Uruguay, with an urban population of 61.3 per cent in 1963, only 2.3 per cent of the young population had no formal education.

The rest of the countries on which information is available fall between these two extremes and can be classified in broad categories according to their level of urbanization, i.e., countries with an urban population of less than 20 per cent, from 20 to 30 per cent, and so on. The trend is for the proportion of population without education to fall as the level of urbanization rises. This is clear if countries with an urban population of less than 15 per cent are compared with those with over 40 per cent: in the former, about 50 per cent of the age group considered was excluded from the formal school system, while in the latter the proportion was 10 per cent or less.

Table 8
LATIN AMERICA: EDUCATION OF POPULATION AGED 15 TO 19 YEARS, ACCORDING TO DEGREE OF URBANIZATION

| Urbanization + 20 000 | Country | Degree of urbanization (percentages) | Year | Education 15 to 19 age group a/ | | | | Per capita gross domestic product (dollars) |
|--------------------------|--------------------|--|------|---------------------------------|-----------------|---------|----------------------------|---|
| | | | | Unknown | No education | Primary | Secondary and higher | |
| - 20% | Haiti | 5.1 | 1950 | 0.1 | 86.4 | 10.8 | 2.7 | 97 |
| | Guatemala | 11.2 | 1950 | - | 67.8 | 29.0 | 3.4 | 253 |
| | Honduras | 11.6 | 1961 | 1.6 | 45.7 | 46.2 | 6.5 | 199 |
| | El Salvador | 12.9 | 1950 | - | 58.7 | 36.9 | 4.4 | 211 |
| | Nicaragua | 15.2 | 1950 | - | 63.4 | 33.0 | 3.6 | 197 |
| | Guatemala | 15.5 | 1964 | - | 59.4 | 34.2 | 6.4 | 303 |
| | Paraguay | 15.6 | 1950 | - | 21.8 | 71.0 | 7.2 | 251 |
| | El Salvador | 17.7 | 1961 | 0.4 | 42.7 | 47.4 | 9.5 | 262 |
| | Ecuador | 17.8 | 1950 | 36.2 | - | 55.1 | 8.7 | 219 |
| | Dominican Republic | 18.7 | 1960 | | 17.0 | 70.3 | 12.7 | 205 |
| - 30% | Brazil | 20.2 | 1950 | - | 56.7 | 36.5 | 6.8 | 187 |
| | Costa Rica | 22.3 | 1950 | - | 16.6 | 74.9 | 8.5 | 291 |
| | Colombia | 23.0 | 1951 | - | 35.0 | 55.1 | 9.9 | 272 |
| | Costa Rica | 24.0 | 1963 | - | 8.6 | 71.7 | 19.7 | 428 |
| | Jamaica | 24.8 | 1960 | - | 8.2 | 81.6 | 10.2 | - |
| | Ecuador | 26.9 | 1962 | 0.1 | 20.2 | 63.2 | 16.5 | 264 |
| | Panama | 28.6 | 1950 | - | 21.0 | 60.0 | 19.0 | 357 |
| | Peru | 28.9 | 1961 | 1.2 | 26.1 | 55.1 | 17.6 | 329 |
| | Mexico | 29.6 | 1960 | - | 33.2 | 56.8 | 8.9 | 486 |
| | Venezuela | 32.7 | 1950 | 44.6 | - | 49.5 | 5.9 | 462 |
| - 40% | Cuba | 35.5 | 1953 | | 23.9 | 69.8 | 6.3 | - |
| | Colombia | 36.6 | 1964 | 3.3 | 24.8 | 60.1 | 11.8 | 331 |
| - 50% | Chile | 42.8 | 1952 | 1.3 | 14.4 | 60.3 | 24.0 | 445 |
| | Venezuela | 47.3 | 1961 | 8.8 | 25.2 | 53.4 | 12.6 | 652 |
| - 60% | Chile | 54.7 | 1960 | 1.5 | 9.4 | 58.3 | 30.8 | 498 |
| | Argentina | 57.7 | 1960 | 0.3 | 5.0 | 63.5 | 31.2 | 755 |
| + 60% | Uruguay | 61.3 | 1963 | 0.6 | 2.3 | 58.9 | 38.2 | 667 |

Sources:

1. Degree of urbanization: ECLA, Economic Survey of Latin America, 1968, table 27.
2. Level of education: ECLA, Statistics on Children and Youth in Latin America, Supplement to Statistical Bulletin for Latin America, 1970, p.257.
3. Gross domestic product: ECLA, Producto interno bruto de los países de América Latina. (E/CN.12/L.51/Add.2), Part II, 1 October 1970, table 1.

/Nevertheless, the

Nevertheless, the table shows up a number of anomalies in relation to this trend which cannot be explained away as mere exceptions to the general rule. While most of the countries with an urban population of 20 per cent in the first group show high rates for population outside the school system, Paraguay rates 21.8 per cent without education in 1950, and the Dominican Republic only 17 per cent in 1960. These percentages are not only lower than in countries with an intermediate level of urbanization, but also lower than in countries with a high level of urbanization such as Venezuela where, with an urban population of 47.3 per cent in 1961, 25.2 per cent of the population aged 15 to 19 years had had no formal education. In the second group, countries with an urban population of 20 to 30 per cent, success in incorporating young people into the education system is not at all correlated with urbanization. In countries such as Costa Rica and Jamaica, where about 25 per cent of the population was urban in 1960, the proportion without education was 8 per cent; at the other end of the scale, Brazil had 56.7 per cent outside the school system in 1950. The higher categories show a progressively closer correlation with urbanization, except in Venezuela whose rapid urban growth was not accompanied by a similarly rapid improvement in enrolment.

The relation between education and urbanization is considered to be a classic correlation between variables, with urbanization being the independent variable and education the dependent variable. The assumption in this relation is that urbanization is an external and easily measurable manifestation of a more complex phenomenon, i.e., the change from a rural social structure to an urban social structure. These structures are considered as two static positions at opposite ends of a continuum, one representing traditional society and the other modern society. These concepts are conditioned in their turn by the content implicitly assigned to them. Urban society is understood to be modern because from an economic standpoint it represents industrialization and the development of the modern services sectors. The corollaries of this are a need for skilled manpower to fulfil the new economic roles, and diversification of the social strata with the resulting expansion of the middle-income groups which are at

/an intermediate

an intermediate level in the economic process. Because of the increasing use of modern techniques, the new economic structure requires manpower with a level of education of the kind obtained in the formal school system; at the same time, since the economic structure has led to a new type of social stratification characterized by vertical mobility and the assignment of roles according to universally recognized qualifications the individual's achievement of upward mobility depends on increasingly high levels of formal education. It is also understood that education expands as a form of cultural consumption by a richer society and because of all the requirements flowing from a higher level of urban inter-action.

This interpretation has been challenged both from the theoretical point of view, and because it implicitly presupposes repeating the development process of the more advanced countries. The first issue would introduce the question of development theory, which is outside the scope of this study. While the second has many facets, it is necessary to consider the most important of these at some length in order to place the educational structure of the Latin American countries in its proper context.

The first assumption in the correlation is that industrial development is the factor conditioning the manpower requirements deriving from urbanization, which give rise to a migratory flow from the country to the town. The wealth of literature on migration and urbanization in Latin America has made it clear that in some cases migrants are expelled from or reject rural areas quite independently of the type of labour market existing in the cities, and that the economic system in the cities has been, and according to projections will continue to be, incapable of absorbing the demand for employment deriving from the increase in the economically active population as a result of both migration and natural population growth. Urban population growth is inseparable from the stagnation or slow growth of the proportion of labour employed in industry, owing to the combined effect of the introduction of new labour-saving techniques and the obstacles in the way of industrial expansion of the Latin American economies.

/The second

The second assumption is that the urban economic structure will achieve the same degree of homogeneity in manpower and differentiation of social groups as exists in industrial societies. Quite to the contrary, it may be inferred from both studies on marginality and studies on the new wage-earning middle classes that the employment trend is towards a growing differentiation without achieving homogeneity within a single system. The concepts that define this situation vary according to author: structural dualism, inability to absorb the whole population in the modern production system; systems with high, average and minimal productivity levels; central economic system and marginal economic system; unintegrated economic structures as a result of dependence; economic systems typical of a backward social structure, etc. There are also different interpretations of the factors conditioning the structure of under-development or dependence, the relations between the two or the many economic and social systems resulting from the lack of homogeneous integration, and the way in which it can be achieved. The common denominator in all the analyses is the realization that the borderline between development and under-development is not demarcated by national frontiers; in each country there are developed and under-developed areas, each with its own production system and social sectors that are interrelated by various forms of complementarity and denomination. This situation hardly represents a dichotomous view of development versus under-development, and it is more correct in this case to refer to typical social structures of dependent countries.

Table 8 also shows the per capita gross domestic product for the years considered and a similar but even more marked correlation with education than with urbanization. If the countries are grouped in brackets of up to 250 dollars, between 250 and 300 dollars, and then successively in 100 dollar steps, it will be noted that the differences between countries within the same bracket as regards percentage without education are in some cases larger than the average differences between the various brackets. For example, Guatemala has a per capita gross domestic product of 303 dollars, and 59.4 per cent of its young population is receiving no education, while the figures for Panama are 357 dollars and 21 per cent

/respectively; in

respectively; in Costa Rica, with a gross domestic product of 428 dollars, 8.6 per cent of the young population is receiving no education, while for Mexico these figures are 486 dollars and 33.2 per cent respectively.

The gross domestic product indicator calls for much the same comments as the urbanization indicator. The correlation between the two rests on the assumption that the gross domestic product expresses a given degree of economic development which has a relatively homogeneous value in the society considered as a whole, and that the development poles have been able to absorb the different economic sectors into a modern production system. Disparities in productivity have been described as an indication of superimposed types of production, from the most modern down to the most primitive; in some countries in which a significant part of the gross domestic product is obtained from a single type of production - petroleum, mining products, etc. - they are fairly considerable and affect the demand for skilled manpower and, consequently, the spread of education as a natural result of economic development.

Another point to be considered is the capacity of the economic system to finance the cost of mass education. In countries where the gross domestic product is very low, this capacity is limited, but at slightly higher levels it seems to be a question not of economic capacity but rather of what priority is given to the allocation of resources to education, and whether the policies in force favour educating the masses or concentrating resources in educating élites.

7. Education and social structure

The different questions considered in this chapter impose the need for a multiple approach to the relationship between types of education and the over-all social structure.

(a) First, it is evident that the inability of education systems to provide a minimum level of education for the whole population is linked to the nature of the labour market. The economic system considered as a unit does not always require manpower with even a minimum of education and technical-scientific training. There is a highly developed sector of the

/economy which

economy which employs only persons with a high level of education; a middle sector which is satisfied with a broad range of levels of education and employs from the barely literate to the fully trained technician; and lastly a marginal economic sector which employs, if at all, illiterates and persons who have not completed their studies. The technological level of this last sector is so low that a person does not need to have achieved a minimum educational level to fill an occupational role, and such vocational training as there is takes the form of imitation or the personal transfer of knowledge. If the economy, in order to function properly, really required human resources with in every case a minimum of primary education, educational systems would spread to cover all the school-age population, and adult education would become a genuinely important factor; with the result that not only the State but economic enterprises and organizations as well would be forced to take a hand.

(b) Secondly, it is equally clear that if the social groups which are in power set themselves the goal of education the broad masses, this goal could be achieved in most of the Latin American countries so long as the policy involved cutting back expenditure in other areas - for example, the armed forces - and reducing the consumption of the top income groups as a means of tapping resources for use in mass education.

(c) Thirdly, the experience of European countries which, without being the most advanced of these nations, established education for the broad masses at the beginning of this century, and the experience of Latin American countries which were ahead in educational matters and initiated a similar campaign at the same time, show that, even in essentially rural societies, education programmes were carried out in all cases where priority was assigned to socializing the population by transmitting the predominating values of the social system. The final objectives varied widely, ranging from the national integration of multi-national population groups formed by immigration through the objectives of preparing the citizen of a country for new emerging political systems, to the objective of political socialization with a specific set of values in order to develop a consensus confronting the breakdown of traditional forms of domination. In contrast, if a society continues to be ruled by undisputed traditional forms of domination

/- servitude, internal

- servitude, internal colonialism, semi-feudalism, bossism, paternalism, etc. - education ceases to be of priority concern for the above-mentioned political purposes and, consequently, its development is slow.

(d) Fourthly, the relations between development and education may be established indirectly by the demands of social groups which are mobilized by the development process. In Latin America, where the relationship between industrialization and economic modernization on the one hand and education as a prerequisite for employment on the other, is essentially equivocal, the correlation between urbanization and the spread of education becomes effective through the social mobilization of urban groups. The fact of living in a town makes people aware of the existence of a developed economic sector which employs persons with a medium and high level of education, and this impels part of the population to try to obtain access to that state by means of education. The realization that a developed area exists and a positive attitude towards upward social mobility account for a keen demand for education which is not directly motivated by the average training requirements of the urban employment structure. The demonstration effect of development poles and modern economic areas is undoubtedly a more important factor in understanding the social demand for education, and consequently its expansion, than the training requirements of the existing urban economic structure.

In this case the relationship between development and education takes place through the intermediary of the social structures. Development has a direct and indirect effect on urbanization, the new urban structures establish potential conditions for mobilizing increasingly large social groups with power to exert pressure on the political authorities to increase the supply of education, while the demand for education is directly dependent on the training requirements of the developed sectors of the economy and indirectly on the stimulus to social mobility through education created simply by the presence of an employment and income group that is in a position of privilege vis-à-vis the average for the urban sector.

(e) The urban middle-income groups make the best use of the education offered and a large part of the pressure they organize to achieve its expansion redounds to their exclusive benefit. Because of their depressed

/social and

social and cultural situation, the lower income social groups are unable to bring pressure to bear to obtain education on a scale commensurate with their needs, and even if it were available there would be no guarantee of successful results owing to a number of disadvantages as regards intellectual development, the fact of belonging to a subculture different from the culture imparted by the school system, and the necessity of entering the labour market at an early age.

The existence of an educational system which is incapable of providing the entire school-age population with a primary education but provides a minority sector with educational opportunities up to a well-advanced age and up to high levels, is a direct manifestation of the way in which the structure of education is influenced by the pressure exerted by the middle-income groups, which in the end are the main consumers of educational output.

(f) Among the various types of social participation education is the sector in which participation is widest. This affirmation is perfectly valid if education is compared with income distribution by social categories, the allocation of housing and urban services, and social security. Comparatively speaking, the greatest achievements of social development policy in all countries are in education.

The relatively privileged position of education is based on several factors not always mutually compatible: (i) Because of its close relationship with the values declared by the different social systems in the Latin American countries; various social groups constantly strive to translate those values into reality; (ii) The supply of education is probably one of the types of demand for social participation which is easiest to satisfy from the economic standpoint; (iii) The spread of education enables the power structure to meet the employment demand of the middle-income groups or the sectors moving up to them. In many countries of the region, the "educational enterprise" as a unit has the largest number of officials and technicians, and in some countries the main employment market for intellectuals, in the broadest sense of the word, is in teaching at the different levels. The spread of secondary and higher education creates a demand for employment consistent with this level of education which, in the absence of a reasonable rate of economic growth, can be satisfied only by increasing the educational

/supply; (iv)

supply; (iv) This increase could facilitate the deferring of other social demands. Various studies show that social groups at the lower end of the social scale are more prepared to make sacrifices if at the same time the state offers educational opportunities for their children; (v) The spread of education permits the predominating values in the social system to be transmitted to the broad masses whose links with the traditional means of social control have been severed as a result of urbanization.

All these factors account for the fact that the population's participation in education is greater than in other social sectors, and this accentuates the contradictory effects which the different demands of the economic, ideological, class and power systems may have on education. The result is the type of educational structure prevailing in Latin America, which is not the same as that found in past and present developed societies.

Secondary education has a special place in this structure and its analysis is not exhausted with the above observations. The following section deals with the concept of secondary education and its specific relationships with social classes, social change and employment.

III. THE CONCEPT OF SECONDARY EDUCATION

1. Concepts

The label of secondary education groups together a number of institutions of differing aims and denominations whose functions vary in significance in the different societies. This problem arises in any consideration of the educational systems of the developed countries, but in the case of Latin America the institutions concerned and their functions have their origins in two main currents or trends: one in the evolution of the educational system in relation to the national theory of the more advanced countries, resulting in the establishment of new institutions which are expected to bring about specific cultural and/or social changes, even though they may not always be compatible with the actual situation of the country.

The relative ease with which it has been possible to establish new institutions, and introduce changes in curricula which are not always consistent with the operational requirements of national social structures, indicates that the social groups that use educational services and the rest of society reformulate the objectives and functions of educational systems according to expectations that do not necessarily coincide with those that teachers and educational authorities may have when organizing and changing institutions and curricula.

This different and sometimes contradictory conception of the functions of educational systems inevitably leads to the conclusion that these functions are not necessarily the same as those provided for in plans and that an analysis of secondary education should take account of: the declared functions and objectives of institutions; the form these functions and objectives assume for the social groups that consume education; and lastly, the way in which society as a whole reformulates the functions and objectives of educational systems in terms of the labour market, use of human resources, social status, etc.

The term "secondary education" is in itself equivocal. Historically speaking it can be said to have had a single meaning when it referred to a type of education received only by those who, having completed their

/primary education,

primary education, were preparing to continue with higher studies, and when it was provided in institutions responsible for effecting the transition from one to the other. Implicit in the term "secondary education" was the concept of transition from one level to the next, and therefore its function was limited to preparing pupils for entry to higher education and its object was to transfer knowledge, culture and values which would equip the pupil to continue with higher studies.

Currently, a distinction may be made in secondary education between a number of objectives that do not necessarily coincide with the proposed fields of specialization:^{1/}

(a) Cultural education and socialization required as a basis for subsequent higher and specialized education.

(b) Technical, vocational and teacher training in preparation for occupations which it is assumed can be carried out without further training after the secondary studies are completed.

(c) Basic education, as a supplement to primary education - and in some countries integrated with the latter in a single course - which is considered - as was primary education at an earlier stage - as essential training for the development of the person as an individual and a member of society; secondary education thus qualifies equally for continuing with higher studies and for entry into the labour market - with or without specific training subsequently - that is, it qualifies young people to perform the various social roles that will correspond to them as adults in the future.

These three types of objectives are combined in different degrees in the institutional systems, and beyond them the social groups constituting the users of secondary education have brought about de facto changes in formal objectives, bringing about a transition from educational institutions with type (a) objectives to institutions which formally or in fact have type (c) objectives, for instance.

^{1/} For instance, teacher training in Argentina, whose formal objective was the training of educators, was transformed by groups of users into preparation for university entrance and also into basic education, which explains its demographic importance compared with secondary or general education.

Historically, the aim of the first secondary education institutions in Latin America was to prepare students to go on to higher education. Side by side with these institutions, to meet the training requirements of artisans and similar workers, there sprang up a different kind of educational institution, for a different social and cultural level, whose aim was to train workers and artisans for industrial activities. A subsequent specialized offshoot of secondary education was teacher training. This bipartite or tripartite scheme of secondary education systems with different levels of objectives was common to the countries of the area from the beginning of the century up to around the Second World War and corresponded to certain characteristics of the social structure: education for élites, with a high intellectual content at the level required by universities with marked humanistic tendencies; training for labour at the low level of skill required given the scanty development of the industry served by the lower classes, who received professional and social status within their own class; and lastly, teacher training which was a channel for bringing women into the educational system, together with the best brains of the working and lower middle classes, whose possibilities of continuing with higher education were remote. The greater or lesser development of the latter sector depended on the policies adopted by the establishment in respect of mass education, which determined the size of the labour market for which teacher-trainers were required.

2. Changes in secondary education

From the Second World War onwards, the changes in secondary education in relation to structural changes in the Latin American societies may be summarized as follows:

(a) Some countries maintained a tripartite system, as outlined above, without major changes. This situation was correlative to a low level of quantitative development of secondary education.

(b) Other countries maintained the traditional pattern, but owing to quantitative growth, secondary education was transformed de facto, though not in content, into basic education. The incorporation of students of lower socio-cultural origin necessarily modified the content of the education. So as to permit the integration of this new type of student

/the aspects

the aspects of socialization and general culture were emphasized, pedagogical communication inevitably underwent changes, and the cognitive content of this communication was reduced, but at the same time the curriculum and the elitist orientation of the former secondary education were maintained.

(c) Other countries experienced the situation outlined in (b), but at the same time made important changes in vocational education, transforming it into technical education and making it valid qualification for continuing to higher studies.

(d) Lastly, another group of countries introduced structural changes, either by creating a system of basic education comprising primary education and a part of what was previously secondary education, or by dividing the secondary course into an elementary stage, and a second stage defined according to specific objectives.

The significance of this wide variety of institutions that can all be lumped together under the head of secondary education varies according to the nature of access to this level of education and according to the prospects and nature of the employment market for those who complete their secondary education.

The new basic functions of secondary education will correspond to reality only in those societies that have made it possible for nearly all their young people to enter the educational system and to complete the primary courses leading up to secondary education. If this is not the case, changes in the structure and curriculum of secondary education will not alter its traditional function of training élites, a large number of whom will demand to go on to higher studies or administrative employment that accords with their social status prior to education rather than with their qualifications.

If the occupational prospects of those who complete their secondary education are not related specifically to what they actually learn but rather to the formal and ritual acceptance of certificates which assure them access to a "captive" labour market, or if the labour market offers no prospects for the incorporation of secondary school leavers in skilled jobs, whatever their branch of specialization, not only will the role of secondary education in society differ, but its content will be changed,

/and there

and there will be a return to courses whose theoretical objective is to provide the basic grounding for traditional or secondary education.

The concept of basic education draws its validity from the demands of a differentiated society which, in order to be able to function, requires the intensive development of individual talents so as to permit their assimilation into complex production processes, their training in specific techniques and in general their adaptability to new roles in a changing society. If these conditions are not established in society, the demands it makes of education will become increasingly weaker, thus allowing the purely academic orientations of teachers to cause a return to the objective of learning for learning's sake. All types of educators, on account of their professional orientation, tend to disregard the problem of assimilation into the social environment, and, as their social environment is an intellectual one and their objective learning, they end up by considering that the aim of education is to prepare pupils for life in an intellectual environment. Thus, a system of education whose structure and syllabus should in theory be basic tends, without the pressure of occupational demand, to lead to a return to traditional secondary education, midway between the primary level and a higher level of intellectual training.

But even discounting the influence of educators, if the labour market does not offer job opportunities to pupils who have completed their basic course - either directly or after they have undergone specific apprenticeship training - pupils will realize that the only way to obtain employment is to improve their qualifications by undertaking more years of study and consequently they too will consider the new basic education institution as a passage to higher studies.

These observations appear to be called for at a time when many social groups consider that changes in plans and curricula for different types of basic education, and in some cases the formal elimination of secondary education, will necessarily lead to the establishment of a new type of education and perhaps a new type of society.

IV. THE EXPANSION OF SECONDARY EDUCATION

1. Over-all growth of secondary education

There was a considerable and widespread demographic growth of secondary education in Latin America between 1960 and 1968-1969. This growth was dictated not by the increase in volume of the population of school age, but by an increase in the coverage of the system. One way of measuring this trend is to compare the level of enrolment with the population normally considered of school age, to derive what is termed the adjusted enrolment ratio. In 1960, the average ratio for the countries considered was 15.7 per cent, and in 1969 it had risen to 27.6 per cent. The enormous gap between the countries at each end of the scale should be borne in mind in considering this increase: thus, in Haiti, the ratio of enrolment to population of school age was 3 per cent in 1960 and 4 per cent in 1969, while in Uruguay the figures were 37 per cent in 1960 and 56 per cent in 1969.

The quantitative increase in enrolment was even greater because of the weight of demographically larger age groups. In all the countries of the region, except Bolivia and Haiti, the growth rate of enrolment was over 50 per cent, which means that the secondary sector has become the fastest growing of the three levels of education. The growth rate ranged between 50 and 100 per cent in countries whose system of secondary education had already shown considerable development at the beginning of the decade (64.1 per cent for Argentina; 71.2 per cent for Panama; 72.1 per cent for Uruguay, and close to 100 per cent for Paraguay).^{1/} There was a rate of between 100 and 150 per cent in three countries where growth had previously been of average intensity (Cuba, 113.8 per cent; Costa Rica, 116.7 per cent; and Venezuela, 118.3 per cent), and higher rates in four countries of previously limited development (Ecuador, 125.3 per cent; Honduras, 128.9 per cent; Colombia, 142.5 per cent; and El Salvador, 147.6 per cent). Lastly, growth rates of more than 150 per cent were

^{1/} The case of Chile has not been considered since, because the basic course was extended to eight years, secondary enrolment appears to grow only very slightly.

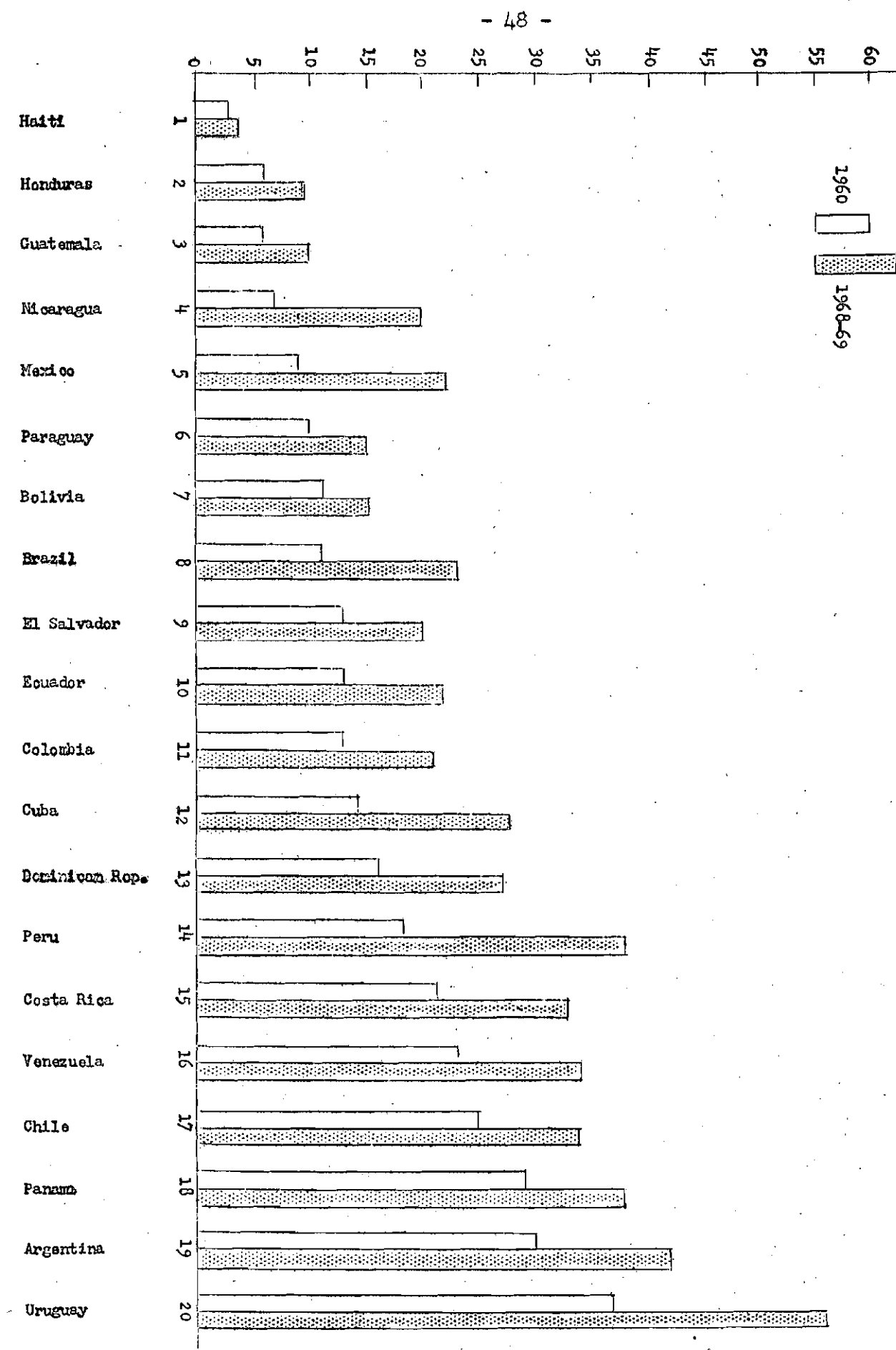
recorded for countries where secondary education had, generally speaking, been of scant demographic importance during the previous decade (Guatemala 151.3 per cent; Dominican Republic, 161.3 per cent; Brazil, 172.3 per cent; Peru, 184 per cent; Mexico, 189 per cent, and Nicaragua, 300 per cent).

The differences in the growth rates of enrolment led to a closer approximation among the countries of the region as regards adjusted enrolment ratios. In 1960, the ratio was 5 for the first quartile and 37 for the mode, while in 1969 the ratios had risen to 15 and 56, respectively.

There is less divergence among the countries as regards the rate of secondary school enrolment, but more or less the same countries remain at the extreme ends of the distribution, while there are changes in the order of countries in the central group. Of the twenty countries considered in 1960, Venezuela, Chile, Panama, Argentina and Uruguay, in ascending order, occupied the space between the third quartile and the mode; the same countries maintained their positions in 1969, with the apparent exception of Chile where, owing to a change of structure, the secondary cycle was reduced to four years, and consequently Chile dropped below Peru in the distribution. In 1960, the first space in the distribution included Haiti, Honduras, Guatemala, Nicaragua and Mexico. In 1969, the last two countries were replaced by Paraguay and Bolivia which dropped from their positions in the second quartile. Only two countries, Ecuador and Colombia, maintained their position in the second quartile between the two years considered, and only Cuba and Costa Rica retained their position in the third inter-quartile space. These changes in the central spaces of the scale suggest that the countries which currently have the highest rates of school enrolment may well be overtaken by others during the next decade.

There is no obvious correlation between the per capita growth of the gross domestic product at factor cost and the increase in secondary enrolment or the increase in adjusted enrolment rates. Some illustrations of this fact may be drawn from table 9: in Mexico the GDP grew by 33 per cent, and enrolment by 190 per cent, while an additional 13 per cent of the youth are included in secondary school. The corresponding figures for Bolivia were 33, 37 and 4 per cent. Paraguay and Ecuador had about the same GDP

FIGURE 1
LATIN AMERICA: ADJUSTED ENROLLMENT RATE, SECONDARY EDUCATION,
1960 AND 1968-1969



/Table 9

Table 9

RELATIONSHIP BETWEEN THE GROWTH OF URBAN POPULATION, THE INCREASE IN ENROLMENT IN ALL BRANCHES
OF SECONDARY SCHOOL EDUCATION AND THE POPULATION OF SCHOOL AGE

| Legal of urban ization in 1970 (percent- age) | Country | Urban population + 20 000 a/ | | | Secondary enrolment b/ | | | Secondary enrolment/ primary | | Adjusted secondary enrolment | | Per capita GDP at factor cost e/ (dollars at 1960 prices) | | |
|---|--------------------|---------------------------------|------|----------------|------------------------|-----------|----------------|------------------------------------|--------|------------------------------------|------|--|------|----------------|
| | | 1960 | 1970 | Growth rate | Thousands | | Growth rate | enrolment g/ (percentages) | | rates d/ | | 1960 | 1969 | Growth rate |
| | | | | | 1960 | 1968 | | 1960 | 1968 | 1960 | 1968 | | | |
| | | | | | | | | | | | | | | |
| -20 | Haiti | 6.0 | 6.9 | 44.9 | 19.5 | 27.4f/ | 40.5 | 8.5 | 9.6f/ | 3 | 4f/ | 96 | 88 | -3.4 |
| | Honduras | 10.9 | 15.3 | 82.5 | 15.2 | 34.8 | 123.9 | 7.4 | 9.2 | 6 | 10 | 196 | 231 | 17.9 |
| | Guatemala | 15.5 | 18.0 | 40.8 | 27.3 | 68.6g/ | 151.3 | 9.2 | 14.0g/ | 6 | 10g/ | 276 | 336 | 21.7 |
| | El Salvador | 17.7 | 19.4 | 51.0 | 34.0 | 84.2g/ | 147.6 | 10.6 | 16.3g/ | 13 | 20g/ | 254 | 312 | 22.8 |
| -30 | Paraguay | 17.0 | 20.9 | 63.5 | 24.6 | 47.3 | 92.3 | 8.2 | 11.8 | 10 | 15 | 245 | 268 | 9.4 |
| | Bolivia | 22.1 | 23.3 | 33.2 | 54.2 | 74.5g/ | 37.5 | 14.6 | 11.2g/ | 11 | 15g/ | 147 | 196 | 33.3 |
| | Nicaragua | 23.0 | 24.6 | 41.1 | 11.4 | 45.6g/ | 300.0 | 7.9 | 17.1g/ | 7 | 20g/ | 248 | 346 | 39.5 |
| | Dominican Republic | 18.7 | 29.9 | 111.3 | 53.2 | 139.0g/ | 161.3 | 10.5 | 19.1g/ | 16 | 27 | 205 | 205 | 0.0 |
| -40 | Costa Rica | 24.0 | 31.1 | 74.7 | 28.7 | 62.2 | 116.7 | 14.2 | 19.3 | 21 | 33 | 399 | 517 | 29.6 |
| | Ecuador | 27.9 | 31.9 | 54.1 | 67.1 | 151.2h/ | 125.3 | 11.3 | 16.8h/ | 13 | 22 | 261 | 287 | 10.0 |
| | Peru | 28.4 | 32.7 | 58.4 | 198.3 | 563.7 | 184.3 | 14.6 | 25.6 | 18 | 38g/ | 313 | 372 | 18.8 |
| | Panama | 33.1 | 38.2 | 51.9 | 38.9 | 66.6 | 71.2 | 24.0 | 29.9 | 29 | 38 | 429 | 651 | 51.7 |
| -50 | Mexico | 33.3 | 40.5 | 76.5 | 512.2 | 1 483.9g/ | 189.7 | 10.5 | 17.4g/ | 9 | 22g/ | 486 | 649 | 33.5 |
| | Brazil | 29.3 | 43.4 | 94.4 | 1 177.4 | 3 205.9 | 172.3 | 15.7 | 26.8 | 11 | 23 | 268 | 338 | 26.1 |
| | Colombia | 36.2 | 43.4 | 51.9 | 243.2 | 587.4 | 141.5 | 14.4 | 21.5 | 13 | 21 | 311 | 358 | 15.1 |
| | Cuba | 44.0 | 47.5 | 26.9 | 122.4 | 261.7 | 113.8 | 11.9 | 19.6 | 14 | 28g/ | | | |
| -60 | Chile | 49.4 | 57.0 | 37.6 | 228.5 | 267.8g1/ | 17.2 | 19.5 | 13.5g/ | 25 | 34g/ | 498 | 593 | 19.1 |
| +60 | Venezuela | 47.1 | 64.4 | 95.6 | 180.6 | 394.3 | 118.3 | 14.8 | 24.6 | 23 | 34 | 661 | 731 | 10.6 |
| | Uruguay | 61.2 | 66.8 | 21.6 | 93.4 | 160.7 | 72.1 | 31.0 | 43.5 | 37 | 56 | 696 | 666 | -4.3 |
| | Argentina | 58.1 | 70.7 | 35.9 | 563.5 | 924.8g/ | 64.1 | 19.8 | 27.6g/ | 30 | 42 | 755 | 902 | 19.5 |

a/ Alvaro Passos, ECLA Social Affairs Division, *América Latina: Estimación del crecimiento urbano*, first draft for integrated discussion.

b/ Information supplied by UNESCO from the Statistical Annex to be submitted at the Conference of Ministers of Education in Caracas, December 1971, Table 41.

c/ ECLA Social Affairs Division.

d/ UNESCO, Conference of Ministers of Education, Caracas, December 1971.

e/ ECLA, *Producto interno bruto de los países de América Latina*, Part II (E/CN.12/L.51/Add.2)

f/ 1966.

g/ 1969.

h/ 1967.

i/ Information on Chile does not include data on the first and second years of secondary education, which as a result of the Educational Reform, have now become the seventh and eighth years of Primary education.

in 1969, representing an increase of about 10 per cent in both cases, but while the enrolment rate was pushed up by only 5 per cent in Paraguay, it rose by 9 per cent in Ecuador. Lastly, two significant examples: in Uruguay, the per capita GDP fell by 4.3 per cent, secondary enrolment increased by 72 per cent and an additional 19 per cent of the population of school age was incorporated in the secondary system; moreover, despite the economic recession, not only did Uruguay maintain its front-ranking position as regards the enrolment rate (56 per cent) but appears to be increasing its lead over its nearest rivals as its growth rate is rising faster. A similar, though not so clear-cut, case is that of the Dominican Republic, where there was no increase in the GDP, an increase of 161.3 per cent in secondary enrolment, and an upswing of 11 per cent in the adjusted enrolment rate.

Comparisons with the population growth rates in towns of 20,000 and more inhabitants are equally ambiguous. Highly urbanized countries with low increases in urban population growth had high increases in secondary enrolment rates, for instance, Uruguay, Argentina and Cuba. The latter and Peru experienced very moderate increase in the growth of per capita GDP, but the adjusted enrolment rate doubled in both countries. In Chile, if what are now the seventh and eighth years of primary education are considered part of secondary education, the adjusted enrolment rate rose from 25 to 42 per cent, while urban growth was 37.6 per cent and the GDP went up by 19.1 per cent during the same period. In Nicaragua, the urban population increased by only 41 per cent, while secondary enrolment went up by 300 per cent and the adjusted enrolment rate from 7 to 20 per cent. The Dominican Republic showed the highest growth rate of urban population in the period (111 per cent), and a respectable increase in the adjusted enrolment rate, from 16 to 27 per cent. More examples could be given, but from a detailed analysis of them it is clear that the growth of secondary education is not solely dependent on the growth of the per capita GDP or the rate of urbanization or on any indicator taking account of both values. Correlations exist in some cases, but on the whole there are so many exceptions that the expansion of secondary education can be explained only by analysing the social structure of each country.

/The explanation

The explanation must be sought in the inter-action of social groups, the degree to which they are mobilized, the pressure that some of them are able to exert, government policies on education as a form of participation and the general level of the above variables, there will be different types of reaction to the conditions of economic development and urbanization.

Everything seems to point to the fact that, unless the groups in power establish severe limitations on the growth of secondary education, most of the Latin American countries will prolong and even increase their current rates of growth of enrolment. In actual fact, the greatest limitation on growth is contained in the educational system itself, since growth depends on the percentage of persons who complete their primary education, which is still very low in the majority of countries.

An illustration of how much has yet to be done in respect of increasing enrolment rates can be found in the ratio of secondary school enrolment to primary school enrolment. As both types of education are of equal duration in most of the countries, if there were no repetition of courses or abandonment of studies, secondary enrolment would be of the same volume as primary enrolment. The country which currently leads the field in this connexion enrolls 43 pupils in secondary education for every 100 enrolled in primary education; for six countries, including Chile, the figure is between 20 and 30; another seven countries enrol more than 15 pupils in secondary education for every 100 in primary education, and the figure is lower for the remaining countries.

2. Growth of the different branches of secondary education and causes

The share of technical education and teacher-training in the region as a whole is declining vis-à-vis secondary or general education. In 1960, general education covered 64.8 per cent, technical education 25.7 per cent and teacher-training 9.5 per cent. In 1970, the percentages were 68.2, 23.5 and 8.3 per cent, respectively.

The share of general education in most Latin American countries has always been very important and this has been regarded as a dysfunctional factor for development since it implies a lack of technical personnel at an intermediate level. A more careful analysis of the statistics shows that the technical training in the strict sense has a smaller share than the over-all figures would suggest. In 1970, 51 per cent of enrolment in technical education was in commercial studies; while a series of causes existed in the different countries, both in industrial (26 per cent) and professional (14 per cent) studies, especially for women, which had very little to do with technical education in the strict sense.

It should also be pointed out that a part of the teacher-training enrolment does not really contribute to teacher-training. In Argentina, which traditionally had a very high rate of enrolment in teacher-training, a great deal of the teacher-training curriculum reproduces the general education curriculum; courses are about the same length; and they qualify for university entrance. In the circumstances, it is not surprising that a large percentage of students undergo teacher-training without any intention of becoming teachers, or as a second choice if they were unable to continue in other forms of education. In other countries, the situation is not so clear cut but in any case enrolment in teacher-training can not be regarded as having a purely professional aim.

The relatively higher growth of the general side of secondary education is due to certain factors of a transitory nature: (i) Some countries have moved some or all of their teacher-training to a higher level, or have made it the continuation of a cycle of general education at an intermediate level; (ii) Other countries have discouraged teacher-training because the demand for teachers is saturated; (iii) In other countries, as a result of

/specific projects

**LATIN AMERICA: PERCENTAGE RATES AND DISTRIBUTION OF ENROLMENT GENERAL, TEACHER TRAINING AND
TECHNICAL EDUCATION, 1960 AND 1968/1969**

| Degree of urbanization in 1970 in cities of 20 000 inhabitants and over | Country | Percentage distribution in 1960 | | | | Percentage distribution in 1968/1969 | | | |
|---|--------------------|---------------------------------|-----------|---------------------|-----------|--------------------------------------|-----------|---------------------|-----------|
| | | Adjusted enrolment rate | Secondary | Teacher training | Technical | Adjusted enrolment rate | Secondary | Teacher training | Technical |
| - 20% | Haiti | 3 | 77.4 | 1.0 | 21.6 | 4 | 76.7a/ | 0.7a/ | 22.6a/ |
| | Honduras | 6 | 63.8 | 12.5 | 23.7 | 10 | 73.0b/ | 12.9b/ | 14.1b/ |
| | Guatemala | 6 | 81.3 | 8.4 | 10.3 | 10 | 73.3a/ | 11.1a/ | 15.6a/ |
| | El Salvador | 13 | 60.9 | 9.7 | 29.4 | 20 | 68.3a/ | 0.0a/ | 31.7a/ |
| - 30% | Paraguay | 10 | 79.7 | 13.0 | 7.3 | 15 | 86.3b/ | 8.4b/ | 5.3b/ |
| | Bolivia | 11 | 84.1 | 2.2 | 13.7 | 15 | 82.8a/ | 6.5a/ | 10.7a/ |
| | Nicaragua | 7 | 60.5 | 15.8 | 23.7 | 20 | 83.6a/ | 7.2a/ | 9.2a/ |
| | Dominican Republic | 16 | 58.1 | 0.6 | 41.3 | 27 | 70.1a/ | 0.4a/ | 29.5a/ |
| - 40% | Costa Rica | 21 | 95.8 | 0.0 | 4.2 | 33 | 89.5b/ | 0.0b/ | 10.5b/ |
| | Ecuador | 13 | 60.3 | 10.6 | 29.1 | 22 | 56.2a/ | 11.0a/ | 32.8a/ |
| | Peru | 18 | 80.1 | 0.0 | 19.9 | 38 | 83.5b/ | 0.0b/ | 16.5b/ |
| | Panama | 29 | 68.9 | 3.6 | 27.5 | 38 | 66.4b/ | 31.7b/ | 1.9b/ |
| - 50% | Mexico | 9 | 70.7 | 5.7 | 23.6 | 22 | 71.7a/ | 4.0a/ | 24.3a/ |
| | Brazil | 11 | 73.7 | 7.7 | 18.6 | 23 | 72.3b/ | 10.8b/ | 16.9b/ |
| | Colombia | 13 | 57.7 | 11.5 | 30.8 | 21 | 69.1b/ | 9.2b/ | 21.7b/ |
| | Cuba | 14 | 73.4 | 6.1 | 20.5 | 28 | 71.4b/ | 10.6b/ | 18.0b/ |
| - 60% | Chile | 25 | 70.9 | 2.9 | 26.2 | 34 | 66.8a/ | 1.1a/ | 32.1a/ |
| | Venezuela | 23 | 58.1 | 17.5 | 24.4 | 34 | 64.5b/ | 3.2b/ | 32.3b/ |
| + 60% | Uruguay | 37 | 74.9 | 2.6 | 22.5 | 56 | 73.5b/ | 4.3b/ | 22.2b/ |
| | Argentina | 30 | 26.8 | 24.5 | 118.7 | 42 | 22.9a/ | 21.0a/ | 56.1a/ |

Source: Preliminary information obtained from the UNESCO Statistical Annex to be submitted to the Conference of Ministers of Education, December 1971.

a/ 1966.

b/ 1968.

c/ 1969.

d/ 1967.

specific projects or for pragmatic reasons, a course of general education is being established for all who complete the primary level; this, moreover, is planned as the level of studies which corresponds to the earlier role carried out by primary education.

These transitory factors aggravate the more general problem of the situation of secondary education in its relationship to social change.

Merely saying that technical education should be increased is not only a common place, it indicates an over-simplified view of the relationships between education, the job market and class relations. Any definition of the problem requires first placing certain issues in their proper context.

(i) In the first place, the large share held by the general side of secondary education is attributable, first, to the fact that the user groups constitute a minority of the eligible population. Those groups who have managed to enter the system and complete the primary course, have great expectations of keeping or achieving a new status. These expectations cannot be satisfied by manual or technical-manual occupations, which in most countries have a very low social status. They hope to join activities at a higher or intermediate level of prestige, which in most countries are found in the tertiary sector.

(ii) The job market for intellectual skills - more exactly non-manual skills - has the highest growth rate for a number of reasons. The modern industrial sector in all but a very few countries - excluding artisan-type activities, and even more the "make-work" activities of the secondary sector - has lost its capacity for relative and in some case absolute growth in employment. Meanwhile, the share of the services sector in the job market continues to rise, even where the rate of economic development is low, because those with the requisite education are more and more able to put pressure on the authorities to ensure that it continues to expand.

(iii) In many Latin American countries, what is termed technical education comprises an empirical form of apprenticeship which has little to do with genuine technical education. It is not very different from on-the-job training in that it is based on the transmission of certain skills and the use of certain tools. Technical education proper is based on the sequence science-technology-application to a specific field. The quantitative

/importance of

importance of artisan or semi-artisan forms of production and the reluctance of industrial enterprises to use technical rather than manual workers has a detrimental effect on the ability of educational systems to achieve a suitable level of technical training. In other cases, it might be thought that there was a lack of creative imagination with regard to economic changes. For example, the import substitution period, which brought great changes in employment prospects, produced no important changes in basic approach in the technical branch of secondary education. There are even countries whose secondary education system contains no specialized technical training related to their main industrial activities.

(iv) The predominance of scientific techniques in enterprises where production is on a par with that of the developed countries, has given rise to an interesting situation which is worth looking at in detail. There are numerous studies to show that entrepreneurs in such cases prefer to employ persons with a general education rather than those with certificates or studies in technical education. Their argument is that empirical know-how can be relatively easily transmitted on the job, while the value of a general education lies in the ability to analyse cause and effect and to adapt to changing functions.

(v) In most countries, the distribution of the supply of education follows the class structure very closely. Technical studies do not lead on to higher education, not even in specifically technical subjects, and are regarded as inferior, which detracts from their recruitment capacity. This means that there are virtually two training systems leading to different positions in the social scale; any protest that students should go in for technical studies simply becomes an ideological stand against the refusal of the lower social groups to remain indefinitely inferior. This means that the debate initiated at the beginning of the century on how to increase the supply of education without affecting the way social roles are allocated and without altering the class structure continues with the same set of class values; which is detrimental to economic and social development.

It is, however, interesting to note that those countries which made secondary technical education a doorway to higher education, and which took steps to establish technical education at the university level - notably

/Argentina and

Argentina and Chile - succeeded in increasing secondary enrolment substantially, and in improving the capabilities of those students in the secondary system.

(vi) So many factors affect the job market in the industrial, and even more the agricultural sector, that the general training offered by secondary education offers more incentives than specific training for a given skill or group of skills. While some activities are in regression, others are appearing or expanding. In some sectors enterprises at a high level of technology and with high educational demands exist side by side with artisan-type enterprises where the level of technology is zero. General setbacks occur in industry with employment crises which, at the level of the individual can only be solved by migration to the bureaucratic sectors of the labour market. Many enterprises with a large turnover of production techniques are not interested in persons trained in particular processes, while at the same time refusing school-leavers with technical or scientific qualifications because they might make greater demands, without taking into consideration their possible impact on productivity, etc. In such an unstable job market, the most general form of training is the one that gives the most opportunity for mobility within the job, or access to bureaucratic or semi-technical sectors.

/V. CONCLUSIONS

V. CONCLUSIONS

Given the current pattern of changing economic and social structure in Latin America, the fact that the general type of secondary education is the education par excellence in most countries should not be considered prima facie as a dysfunctional factor as far as development is concerned. Whether this general education is functional or dysfunctional for development will depend on its content, its set of values, its co-ordination with more specialized branches of education and its relation to the needs of the economy.

In many countries of the region, part of general or secondary education has been declared to be basic education, but its content and set of values are not much different from those found in traditional pre-university training. First of all, science still does not occupy a large place as regards teaching hours and, even more serious, there are many defects in the teaching of science, including those mentioned by UNESCO, such as antiquated curricula, lack of unifying concepts, presentation of science as an immutable set of truths, lack of practical activity, a critical shortage of teaching staff, both in quantity and quality, lack of equipment and teaching materials, etc.

Secondly, most of the general education curricula do not include any technological training and hence the teaching of science is not linked to the modification and implementation of productive processes but is confined to the purely intellectual plane.

Lastly, the teaching of science does not include practical work or experiments to link science to technology and its applications to actual materials. What are termed practical classes in many education systems operate at more or less the hobby level or are closer to an artisan-type conception of work than to giving practical form to scientific and technological principles. This gives rise to situations in which schools teach theoretical physics and chemistry, but have facilities for practical work which are poor copies of carpenter's workshops, for example.

/Many authors

Many authors and policy statements express the view that middle-class values are hostile to manual labour and in consequence responsible for the fact that youth mainly tend towards non-manual activities. The role that value systems and other factors can play in this respect has been extensively discussed in a United Nations publication entitled: "Education, human resources and development in Latin America".^{1/} For present purposes, suffice it to consider the nature of the employment market and the kind of training students receive in general secondary education. The first aspect has already been considered; as regards the second, it is hardly surprising that there is rejection of types of work that were not presented in association with intellectual concepts, that if taught are treated as hobbies and not as forms of production, and that are totally alien to the entrants into general secondary education who, moreover, are for the most part incapable of manipulating objects as opposed to paper or ideas.

Simply expanding the volume of general education if it is similar in content to pre-university education does not transform it into basic education, and those completing the course can have no other aspiration but either to continue on to higher education or to join the market for office jobs or the tertiary sector in general.

The orientation of education has an action and reaction relationship with the employment market. The office sector, and the modern tertiary sector in general, cannot continue to grow indefinitely. In many Latin American countries, and Uruguay is a good example of this, the absorptive capacity of this sector of the employment market has been exhausted despite all the expedients employed to maintain its rate of growth well above reasonable and necessary levels. Not only are there only a few vacancies each year, but they are competed for by a steadily growing number of applicants. Given this severe competition, there is a ceaseless effort to win the race for the job by acquiring ever higher levels of formal knowledge, completing all stages of secondary education and continuing on to university or post-graduate training. At the same time, employers are able to demand increasingly high levels of formal education for posts that do not require such high levels. The assumption is that a person with a complete general

^{1/} United Nations publication, Sales N° E.68.II.G.7.

education will be more capable than a person who has completed only one stage of secondary education and even more capable than a person who has only completed the primary stage. This leads to under-utilization of the available educated human resources, since in such cases the level of education is too high for the needs of the post and although performance in the jobs may well be superior, the fact that education is not being put to full use has an unfavourable effect on economic development because it implies a low rate of return on investment in education. In their turn, increased demands for qualifications by employers sustain and swell demand for extended secondary education, since it will be only possible to achieve higher positions with a longer period of schooling.

This process, which may be termed a devaluation of education, has a wide range of harmful effects:

(i) It encourages the prolongation of secondary and higher education above the requirements of economic systems, leading to many forms of wastage: under-utilization of capacity because there is an imbalance between training and the post occupied; under-utilization because of the accumulation of multiple jobs, each inadequately paid, because the employment market does not offer better opportunities; low remuneration with a consequent lack of incentive; the location of persons in posts that they are apparently suited for as regards education but which, because of the very proliferation of such posts, lack the necessary support services; and lastly the brain drain of expensively trained technicians.

(ii) It cancels out the effects of upward social mobility for certain social strata which from one generation to another rise from illiteracy to complete primary education only to discover that many occupational roles with ought to be reserved for persons of that level are competed for by persons who have completed secondary courses.

(iii) An increasing proportion of expenditure on education is absorbed by the extended secondary cycle and higher education at the expense of the allocations needed to ensure a primary course of studies for the whole population.

/The effects

The effects of the expansion of secondary education on the process of economic and social change in Latin America should be considered in many different perspectives. Stress was laid earlier on the importance of imbuing a broad sector of the population with sufficient knowledge to enable it to take part in new technological production processes and those likely to be created over the next quarter of a century. Some Latin American countries with abundant reserves of educated human resources are admirably fitted to make the changeover to a technical society, which is basically an educated society. They have population groups with sufficient grounding to take courses in up-to-date techniques and follow-up courses that will enable them to gain access to new technical forms of production and organization without the need for prohibitive levels of expenditure. It must of course be admitted that at this stage the fact that the population as a whole lacks a homogeneous educational grounding will create serious difficulties in view of the unemployment, because the unemployed become unemployable once their low level of education makes them irretrievable.

Side by side with this functional potential for development there may be other effects on social change which just because they are less visible cannot be disregarded. The political process in the broadest sense of the term can be and in many cases is more important than the changes in the economic infrastructure. It has been proved that in the past in many countries the motive force of change lay in the transformation of the power structure, which brought to power groups with coherent development projects that constituted intermediate objectives in the achievement of social change.

Latin America has in varying degrees known political systems which had in common the fact that they originated in the heteronomous mobilization of social groups formerly excluded from the decision-making system and in many cases from national life. They became integrated into the social system through rural-urban migration and the various partial forms of participation which they found in urbanization and also, though not always, in employment in the modern sector of the economy.

/The pressure

The pressure for assimilation wrought changes in the relations between social groups, the more so when they coincided with industrialization, and created a new political system of a different kind from the limited form of democracy previously prevailing in nearly all the countries of the region. Ideology, leadership, the type of national development projects and the political language used were in one way or another an expression of the qualitative change operating in society. Adjustments to make the system function without structural changes were another form of response to the participation of the non-politicized masses.

It might be asked whether adjustments of this kind, on the basis of which most of the political systems in Latin America operate, will still be adequate once sectors ranging from one-fifth to one-half of the new generations have formal secondary education and then find it progressively more difficult to be absorbed in the social system.

Education presupposes a qualitative change in a sector of the citizenry for which few political systems have proper channels for participation. In other countries, the populist systems established or compelled the establishment of various mechanisms which can be summed up as a formula for opening up the political process without participation. These mechanisms are scarcely adequate for sectors whose formal education and political socialization permits them to demand other forms of participation in the decision-making process.

The capacity of political systems to absorb this new group depends on the capacity of economic systems to provide employment for increasing numbers of educated persons and their ability to promote individual mobility without altering the relations between the social groups. In contrast, in countries where the gap between the expansion of secondary education and the low rate of economic development or the slow growth of the labour market is steadily widening, the educated sector will probably challenge political systems and social structures, and this could lead to political maladjustment and even violence.

The effects of the lack of a homogeneous level of education may also have considerable political repercussions. On the one hand, a sector of the population which has remained illiterate or below the minimum educational

/level will

level will almost certainly participate in the marginal production system, and politically it is likely that it will be dominated both ideologically and because of its dependence on political patronage. At the other extreme, a sector of highly educated youth may reach very high levels of politization and political discussion, but will have great difficulty in transmitting its ideologies to the dominated sector because of the wide social and cultural gap between them and because the politicized sector is excluded from the domination mechanisms which permit the manipulation of the sector lacking the conditions for full citizenship.

This educational polarization might be repeated at the political level if the legitimacy of those in power were to be recognized as absolute by one sector and completely rejected by the other.

Since education benefits the middle-income groups and since they are the ones most affected by labour market difficulties - the problem has always existed for the marginal sectors, but their capacity for action is completely different - it is very possible that a process of political mobilization will take place shortly in Latin America in which the broad masses will be swept along in the wake of the middle-income groups and the organized proletariat, which are the sectors that are integrated and educated in the system.

If these assumptions have any validity at all, it may well be that one of the ways in which the expansion of education could contribute to social change and possibly economic development would consist in a qualitative transformation of a sector of the citizenry which is in a position to express its demands and alter the character of the political system.

