VOCATIONAL EDUCATION REFORMS IN LATIN AMERICA: A COMPARATIVE STUDY OF BRAZIL AND COLOMBIA

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ABSTRACT

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This thesis offers a comparative analysis of the transformation of the structures of secondary education in two Latin American countries: Brazil and Colombia, with particular reference to the 1970s. At that time, these educational reforms aimed to introduce vocational education, as a preparation for the world of work, into the formal system of education.

This thesis argues that the educational reforms leading to vocational education were a complex product of the interaction of foreign influences and specific local conditions, framed by the dependent character of the development pursued by both societies. These processes included the restructuring of local institutions, emulating external models, and following international advice. In both countries these reforms were affected by local socio-economic demands, and also provided the governments with an useful instrument of political propaganda and ideological control, within claimed intentions of increasing social mobility through education.

To discuss these interpretations in terms of the interplay of internal and external influences on secondary and
vocational education reforms, in Brazil and Colombia, this thesis is made up of five chapters.

Following the Introduction, chapter 1 discusses the theoretical basis of the investigation, exploring the possibilities of using a particular branch of dependency perspective as a way to analyse educational change. Chapter 2 reviews the historical context of the main educational reforms of secondary education in Brazil and Colombia. Chapter 3 analyses the role played by international agencies and external assistance programmes in the reforms leading to vocational education. Chapter 4 discusses the specific political and social conditions in each country which affected the introduction and implementation of vocational education. Chapter 5 offers a re-interpretation of the historical and structural conditions for educational reforms in Brazil and Colombia in recent decades, highlighting the contemporary crisis within the impasse resulting from the dependent development of those countries.
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The purpose of this thesis is to locate the attempts at the vocationalization of secondary education during the 1970s in Brazil and Colombia.

By "vocational education" this thesis means a form of diversification of education in post-primary and secondary schools aimed to prepare pupils for the world of work through both specific job training and the provision of vocational subjects, in the school curriculum. These subjects are intended to generate among students some basic knowledge, skills and the necessary inclination to prepare themselves for future working life [1].

One strong strand in the history of vocational education is locatable at the beginning of this century, in the United States in the attempt to offer "useful" knowledge to all students. This conceptualization was based on the belief in the importance of the link between education and the world of work [2]. The element which characterized vocational education was the combination of vocational and academic studies under one roof, within an American philosophy of a reaction against bookish
education, towards the concept of learning as an active appropriation of knowledge [3].

Of course the history and the concepts of vocationalization are much longer and broader than this. For example, they include socialist variants on the idea, European forms of vocationalization, and particular variants in rural societies and so on. However, it is useful to mention the American experience briefly in approaching a formal definition of vocational education — the theme of American influence on vocationalization in Latin America is a motif in the early chapters of the thesis.

Obviously, the structures and purposes of vocational education however, have since that early American approach, become more complex. The purposes of vocationalization currently have been identified by K. M. Lillis as being: "to alleviate unemployment, to reorientate students attitudes towards rural society, to halt urban migration; to transmit skills and attitudes useful to employment" [4].

The location of these different purposes in different kinds of programmes has been systematized by that author. In this thesis, the definition of vocational education which will be under scrutiny is a combination of two programmes identified by Lillis. First,
vocational education refers here to "developments aimed at creating a compulsory vocationalised component of a core curriculum" [5], e.g. the case of Brazil's 1971 educational reform. Second, vocationalization refers to "the attempt to establish a schooling structure parallel to the traditional academic schools where vocational studies provide a contrasting bias" [6]. This was the case of the post-primary schools known as INEM and ITA in Colombia.

In countries such as Brazil and Colombia during the 1970s, vocationalization was thought to be useful to make the educational system meet the needs of economic development [7]. This thesis will contextualize the way in which vocational education was pursued from the period these programmes were started to the late attempts to extend vocationalization to the whole secondary level in the two countries in the 1970s.

The contextualization of vocational education will be traced, in a triangulation, from three complementary perspectives: i) the improvement of education through educational reforms, related to the socio-economic conditions of the two countries; ii) the role played by various international and regional agencies to make education fit economic development goals; iii) the role education reforms occupied within government policies aimed at economic development. These three perspectives
are placed within a broad theoretical proposition: it is argued that countries like Brazil and Colombia were characterized by a situation of economic, cultural and educational dependence, during most of the period this thesis examines.

The idea of dependency in its simplest meaning, stresses that the economic, cultural and educational development of countries like Brazil and Colombia were strongly affected by foreign initiatives. Dependence on external sources of finance and also on technical resources to develop internal economic structures, locates these countries in a specific model of economic development which poses special difficulties to them [8].

However, this thesis, at a more complex level will argue, that under the conditions posed by dependent development, education had its structures affected and shaped not only by external influences but also by internal influences. In particular following later developments in dependency theory, this thesis will suggest that education in dependent societies is influenced by i) the internal interests which predominated in that particular society; ii) the interests that come from outside that society and iii) the state, which tries to mediate the two previous interests [9].
This thesis will assess the ways in which vocationalization in both countries were affected by the three influences indicated above.

A particular dependency perspective (outlined later) will offer a theoretical basis to understand the macro-structural background within which educational development took place in Brazil and Colombia. These two countries' attempts at economic development followed programmes specially designed for that purpose during the 1960s and 70s [10].

To pursue this analysis based on a particular dependency theory and test its arguments in two concrete situations, this thesis will compare Brazil and Colombia.

The basis for the comparison is that, historically, these two countries underwent similar processes of economic changes from the selling of commodities, like coffee beans, to the development of industrialization; similarly, both attempted to vocationalize their systems of secondary education during the 1970s, after the process of industrialization became accelerated.

The general theoretical frame for this study is provided by late developments in the dependency perspective, and the next chapter will identify one specific branch of this theory: the view of the process of "dependent development". This conceptualization was established by Fernando Henrique Cardoso and Enzo Falleto
and later reassessed by Peter Evans [12]. These authors developed in depth a general explanatory theory for analysing the Latin American economic and social historical situation [13]. The analysis developed by this specific branch of dependency theory focuses on the interrelationships between three major influences: foreign capital, the nation-state, and the role of social classes within the state.

Within this dependency approach, this study will use an historical perspective to analyse the policies of vocationalization, on the grounds that:

*Issues of vocational education for work and of the contemporary structures and problems of education in these societies cannot be properly understood or explained without taking into account the overall historical constraints of colonial dependency [14].*

Thus, overall, this thesis will use an historical framing to look at the context of vocational education reforms, within a macro-analysis of the Latin American process of development, construed by particular dependency theoreticians, with an emphasis (though not an exclusive emphasis) on vocationalization, which is a particular phenomenon within this process. The thesis will investigate the complex constraints on vocational education policies, in the specific context which became known as "dependent development".
The thesis will try to clarify the specific role played in the vocational education reforms by the international agencies, the state, and the economic-political elites and the interrelationship between the reforms, the local conditions and the foreign influences within the two countries.

Starting from the existing interpretation of dependent development as a product of a "triple alliance" between international capital, the state, and the internal social groups [15], vocational education policies in the two countries will be analysed through:

(a) the role of the international agencies, which historically emerged after World War II, and which disseminated ideas, values, and strategies for educational reforms as well as other developmental policies;

(b) the role of the state in dependent societies in the introduction of educational policies in a context of dependent development;

(c) the role of local economic-political elites in the process of borrowing, adaptation, and diffusion of vocational education policies.

Until now, most of the studies of dependency and education have focussed on just one of the three elements mentioned above. This thesis argues that this weakens the possibilities for investigating educational structures under dependency, particularly if such a deterministic
view is accepted of the relationship between economic dependency and cultural transference. Most studies of cultural imperialism have emphasised the impact of foreign models and foreign assistance programmes in moulding educational structures in dependent societies [16]. The studies of neo-colonialism have stressed the new impact of the old metropolitan powers [17]. There are, however, few analyses about how the external influences have been mediated by the role of internal elites. Furthermore, the issue of the interplay of external agencies, internal elites, and the state has been tested in few concrete situations, as far as Latin American studies on dependency and education are concerned.

Thus, the following chapters will deal with the economic aims, socio-economic characteristics and educational policies of Brazil and Colombia with a departure point in the literature of dependency theory [18]. Both Brazil and Colombia are dependent with respect to economic development in Latin America [19]: the dependent development of these two societies implies interrelationships between the economic interests, the state, and social class demands [20].

External investments, and industrialization, were paralleled by internal re-arrangement of political forces which permitted the new kind of development [21]. New
socio-economic policies were introduced by the state, to meet the requirements of new emergent social groups which influenced local governments in the process of attempting educational reforms [22].

Against these complex themes, the thesis poses some relatively simple questions: (a) why were vocational education reforms proposed in Brazil and Colombia in the 1970s; (b) what have been the similarities and differences in the process of adoption of vocational education in the two countries; (c) who encourages or resists these kinds of reforms — in other words, whose interests were these educational structures designed to serve internally and externally; (d) how did vocational education policies relate to economic and social structures.

To pursue these questions, the present work is subdivided into five chapters. Chapter 1 will discuss the theoretical basis and the scope of the investigation. Chapter 2 will review educational trends within the historical framework of the process of development of Brazil and Colombia; Chapter 3 will analyse the role played by the international agencies and assistance programmes in the elaboration of education reforms which led to secondary education vocationalization, within the broad context of external influences directed towards Brazil and Colombia. Chapter 4 will discuss the role of
the state and the elites of Brazil and Colombia, with regard to implementation of vocational education. Chapter 5 will offer an overall interpretation of the contradictions between external influences, the state, and internal elites with respect to vocational education in Brazil and Colombia, and note some elements which are important in the reconstruction of the educational systems now.

NOTES AND REFERENCES


2. A critical understanding of the North-American conceptualization of vocational education was provided by W. Wilms "Captured by the American Dream: Vocational Education in the United States" in J. Lauglo and Kevin M. Lillis (eds.), op. cit. p. 82.

4. See Kevin M. Lillis, "Problems Associated with Vocational Education in Less Developed Countries"., in Roger M. Garret (ed.), Education and Development, London: Croom Helm, 1984, pp.172-199. Vocational education is defined according to the various aims which are pursued under this label.


6. Ibid., p. 173.


8. This thesis will follow the authors who proposed a new stream of interpretation on Latin American development known as dependency theories. An example of this interpretation is Teotonio dos Santos' article "The changing Structure of Foreign Investment in Latin America" in James Petras & Maurice Zeitlin (eds.) Latin America, Reform or Revolution?, Greenwich, Conn., Fawcet Publications Inc., 1968, pp. 94-98. This article offers an historical approach to the question of the incorporation of Latin America into the world economy.


12. Peter Evans, op. cit.p. 25-34.


15. 12. See Peter Evans, op. cit.

16. See the discussion of works on cultural imperialism and neo-colonialism in the next chapter.

17. Chapter 1 will discuss some analyses to test this assumption.

18. See Fernando Henrique Cardoso, Estado y Sociedade en America Latina [State and Society in Latin America], Buenos Aires: Ediciones Nueva Visión, 1972. This work provides an analysis of the character of the state in Latin America following the dependency perspective, but focussing on the internal aspects, with the purpose of offer a general comment of the political framing of the continent. This analysis will provide the basis for
discussing the internal influences on vocational education in the following chapters.


20. See Peter Evans, op. cit. p. 32.


Theories of dependency and educational analysis: a re-appraisal.

The purpose of this chapter is to discuss how the main assumptions of dependency theory could be applied to the analysis of policies such as vocational education in Latin America. For this purpose, this chapter will assess the later formations of the dependency perspective to establish a theoretical perspective to locate the constraints and influences which have acted on vocational education in two dependent societies: Brazil and Colombia.

This thesis will combine two perspectives: one is that which considers education as being deeply influenced by the socio-economic factors in capitalist societies; the other is the analysis of capitalist development in Latin America offered by dependency theory. These theoretical perspectives will be used complementarily to look at one phenomenon typical of societies undergoing to industrialization: the introduction of vocational education.

This chapter will test the following arguments:

i) Dependency theories and analysis have acquired enough sophistication to provide a useful instrument of analysis
for the economic, socio-political and educational features of some late developing countries.

ii) Although economic dependency theories were developed to explain Latin America underdevelopment or late development, there are few regional studies about Latin American educational systems that use the economic dependency approach.

iii) Aspects of economic dependency in Latin America are considerably different from those in Africa and Asia. Therefore, the analyses of educational systems, which were based on studies of those societies, using the approach of economic dependency, do not apply to the Brazilian and Colombian cases.

iv) The adoption of a variety of experiments trying to make the less developed countries catch up with the economically advanced nations is an effect, not a cause, of dependency.

v) Imitating foreign educational models, practices and structures has contributed to the maintenance of a situation of dependence in the less developed countries.

vi) Brazil and Colombia are two examples of how dependency, and the economic development goals in connection with it, have — in certain periods — created internal conditions for
the adoption of external models and institutions which contributed to preserve the situation here characterized as one of dependence.

This chapter will test specifically the arguments i, ii, iii, iv and v. Arguments vi and vii, although they are briefly discussed in this chapter, will also be examined throughout the thesis and, in more detail in chapters 2, 4, and 5.

This chapter, therefore, is subdivided into parts treating each proposition separately. Section 1.1 looks at the present state of dependency theories and how they are related to this study. Section 1.2 provides a critical summary of dependency and educational analyses in Latin America. Section 1.3 reviews the crucial concepts involved in an analysis of "educational dependence". Section 1.4 discusses the role of educational structures and educational reforms in Latin America, either as mechanisms or effects of the situation of dependence. Section 1.5. shows Brazil and Colombia as two different examples of dependent development and educational importation.

1.1- The current stage of dependency theories

The purpose of this section is to give an overview of dependency theory [1], its origin and recent developments,
as well as its contribution to interpreting the adoption of the latest reform of vocational education in Brazil and Colombia.

The analysis is broken up into the specific points: i) new developments in dependency theories; ii) the extension of the dependency theories to the analysis of internal socio-economic changes; iii) the role of dependency theories in the interpretation of vocational education policies; iv) the concepts of state and class within this new approach to dependency theories.

It is argued that dependency theory, which was first established to give an interpretation to what was termed the "underdevelopment" of Latin America, and extended to the so called Third World countries, can provide a fresh explanation of the connection between vocational education and economic development in the two countries.

The basic change in these economic theories, occurred after the impact of foreign capital on, and its integration with, the national sectors of the economy as a whole. This change occurred with the participation of foreign capital and also with a strong participation of the state and the economic elites in those societies [2].

The most important development in dependency theory, is that created by Fernando Henrique Cardoso and Enzo Falleto, which extended an economic dependency perspective into socio-political analysis [3]. The argument which was
advanced by Cardoso was that in the process of the economic incorporation of Latin America into international capitalism, and the need of the state to reconcile economic expansion with political stability, led to the emergence of new patterns of alliance between the various social classes, and between the state and these social groups.

This position arose out of earlier thinking. Dependency theory, which became an alternative interpretation to modernization theory, began to be developed during the fifties, after the new impulse to capitalist development in Latin America. The theory suggested that the new kind of economic orientation those societies were undergoing was only a new form of domination of those societies, hence the term "dependency" [4].

After the economist Paul Baran's theory about "monopoly capital", [5] which discussed the spread of a new formation in the capitalist system towards the less developed countries, the ideas of Andre Gunder Frank, who based his analysis on empirical studies of Brazil and Chile, became widely discussed when he designated the Latin American countries as victims of world capitalist development [6].

These ideas were developed afterwards by different authors, [7] who also emphasized the consequences of integration of Latin America into the world economy; this kind of development resulted from dependence on foreign
investments and foreign aid and loans. This process was related to changes in the economy of the region, where industrialization and foreign capital were combined and increasingly unified in the 1950s [8]. The new form of industrialisation was deeply connected with foreign capital "dominated by large corporations in an oligopoly economy" as Teotónio dos Santos has indicated [9].

However, for the arguments of this chapter, the most important development in dependency theory, is that created by Fernando Henrique Cardoso and Enzo Falleto, which extended the economic dependency perspective into socio-political analysis.

Cardoso's and Falletto's basic statement was that, in Latin American countries widely penetrated by foreign capital, the analysis of internal social dynamics provides a better understanding of the whole dependency process than the narrower analysis of external domination. Basically, their approach offers an understanding of the "unequal and antagonistic patterns of social organization" [10], an explanation for the internal alliances and alterations in the dynamics of social classes as well as in the dependent character of political development. The authors showed how the new productive forces inside Latin American countries were paralleled by the appearance of new social interest groups, new rising expectations, and new contradictions among the social strata [11].
The fresh interpretation of Cardoso and Falleto reformulated the previous postulates of dependency theory, according to which there was no possibility of any kind of development in the "underdeveloped areas". According to these authors' observations about the structural changes in the pattern of economic development in less developed countries, it was possible to recognize there a new kind of dependency: so called "dependent development".

Cardoso has argued that, within the overall parameters of dependency, certain countries (like Brazil, Colombia), have been able to achieve an "associated dependent development" [12]. Within this new definition, development is created by the accumulation of capital together with industrialization at a local level [13]. This new kind of development brings forth new social structures, raises contradictions among the various social strata, and requires new class alliances which end in new forms of state organisation.

This thesis accepts the concept of "associated dependent development" and will apply it to the analysis of a specific policy, that of vocational education, to show how foreign capital and the internal restructuring of the state demanded by dominant social classes came to be reflected in educational policies. This concept of development has been applied to an extensive study of industrialization in Brazil by Peter Evans [14].
The analysis of Cardoso and Faletto — later expanded by Cardoso as well as by Evans — argues that dependency studies should give more attention to the internal determinations of dependence by looking at the nature and the relations of the various social groups within each country. This will be a point of departure for the argument of this thesis, but the external constraints, represented by the role of international agencies, will not be neglected, and will be discussed in chapter 3.

This thesis also notes the recent conclusions from theoreticians of dependency, such as Gabriel Palma, who showed the utility of the theory in treating the internal and external aspects of dependency as complementary:

*It is only by understanding the specificity of movement in these societies as a dialectical unity of both, and a synthesis of this “internal” and “external” factors, that one can explain the particularity of social, political and economic processes in the dependent societies [15].*

Therefore, this thesis will discuss vocational education as a local option, which had roots outside the two countries, but which was also part of internal demands by local groups for an improved educational system, that would keep in pace with economic development.
Within this particular view, it will be possible to discuss how "the system of 'external' domination reappears as an 'internal' phenomenon through the social practices of local groups and classes, who shared its interests and values" [16].

In such a perspective, there is a new stress on the importance of the relationship between the state and the social structure [17]. This theoretical perspective will allow this thesis to put in relief the internal factors, such as, the role of the State and the elites in the establishment of policies favouring vocational education, a point also made in the later developments of dependency studies by Cardoso and Faletto [18].

Reviewing the critiques which were made in the literature about how originally Cardoso and Faletto gave the state only a shadowy existence and put too much stress on "class conflict" rather on politics [19], subsequent studies have been much concerned with the essential nature of the capitalist state in Latin America [20], without neglecting class participation in the process leading to structural dependency. The role of the state will be considered in the way it was developed by Cardoso in his later works, where the state plays a substantial role in the political and economic determinations of development.

This later views contradict the idea of the state as a mere instrument of one dominant social class [21]. The
state, in Brazil, and by extension in countries with a similar degree of dependent development, and similar social structure, responds to the pressures of all classes and social groups that have some political expression within the nation [22].

In chapter 4 the characteristics of the state in countries like Brazil and Colombia and the participation of the social classes within the state will be discussed. This will constitute the analysis of the internal forces which acted on educational change in Brazil and Colombia.

The other concept, which this thesis will borrow from Cardoso's analysis of dependency, is that of social class. Class structure in the Latin American countries is considered to be an extremely mutable phenomenon, with many of the most strategically placed classes still in process of formation [23]. In the current dependency analyses, the class concept is used to discuss groups within the social structure of the dependent societies in relation to the process of capitalist development [24] [25].

1.2- The studies of dependency theories and educational policies in Latin America.
One purpose of this overview on education and dependency is to suggest that dependency theories have not sufficiently explored the interconnections between the internal and external factors which shaped educational change.

This section offers a summary of studies relating educational policies and dependency theory in Latin America, more specifically a summary of studies which offer a criticism of externally influenced educational trends [26]. These kinds of studies were concerned with education in general (rather than vocational education). This section will note the studies related to cultural policies, which included education as part of their purpose.

The educational reforms which occurred in Latin America, during the years between 1960-1970 should be connected to the character of the economic development which framed its social changes. Up to now, although various educational analyses have been undertaken to study this phenomenon, they have offered only a partial view of the problem.

This section therefore suggests that educational change in recent decades in Latin America can be considered as a side-effect of dependent development, a result of external and internal interrelationships affecting social structure.
In Brazil, as in other Latin American countries, studies of the relationship between capitalist dependent development, the state, and the educational structure, have denounced the inequalities of educational systems and exposed the authoritarian control of education by ruling elites [27]. Although these studies made an early contribution in terms of educational dependence, and some of these works have been very influential, it is argued that they have lost their capacity to offer an up to date interpretation in accordance with the later findings of dependency.

The common ground of these studies was the demonstration of how cultural and educational practices in Latin America are influenced by the situation of dependency. According to these studies, educational reforms were part of the process to ensure dependent development in that area [28].

Certain educational programmes, such as vocational education, while widely discussed, have not been analysed with a view to the external constraints on those policies, which is a crucial omission [29]. There has been a wide interest in vocational education, so several studies and events have been devoted to vocational education in Third World countries [30]. Within an international and comparative perspective, however, few studies were based on the conceptualization offered by dependency analysis.
Thus, this section will concentrate on studies which reviewed dependency and education in Latin America. The authors analysed here were chosen because they share the same preoccupation: to show how educational and cultural development in Latin America have been affected by its economic and social evolution, specifically in the aftermath of the kind of development which is dependent on foreign investments [31].

The interrelationship between education and society in Latin America has been identified in the literature through various concepts, such as cultural imperialism, neocolonialism, and educational dependence. Though these concepts are not synonymous, they identify a similar phenomenon: the series of educational ideas, policies, and programmes generated outside, and incorporated by the Latin American countries, as a result of their major integration into a new international economic order, under the strong influence of the United States of America. The approaches offer similar analysis of the effects of importing foreign educational models, but differ in their detailed argumentation.

Octavio Ianni, a Brazilian scholar working within the dependency perspective, published in 1971 an analysis of the cultural domination of Latin America by the United States [32]. He was also influenced by the works of North-American researchers [33] who identified economic aid,
technical assistance, and military programmes, as mechanisms of United States' neo-imperialism.

This line of analysis was useful to identify the variety of instruments of North-American penetration into the continent. In particular, the series of programmes under the auspices of the Alliance for Progress, attracted the attention of these authors, within the broader question of aid. The analyses were concerned with the aims of such programmes and how they affected Latin America. Those studies raised the need to relate educational imports and the situation of dependency [34].

Martin Carnoy, who interpreted United States' programmes of educational assistance, followed the same line of argumentation, though with a different methodology [35]. Carnoy analysed educational reforms in earlier historical periods in the United States and tried to show that their real aims were related to the establishment of an educational system favourable to industry and capitalism. Similar educational reforms, he argued, were promoted years later, through aid programmes, in the "nonindustrialized countries," with similar aims [36].

Furthermore, Carnoy's study indicated how the activities of international agencies were directly linked to the interests of corporate capitalism. In this view, the reforms were "ostensibly designed to promote economic
growth" [37]. Arguing about those agencies' programmes, Carnoy stated:

The aim is to build institutions that complement a capitalist organization of production — an economic organization that channels a high percentage of the increment of output into the hands of a relatively few people and that accepts and even requires foreign investment — and a policy which serves this type of hierarchical structure and U.S. military interests [38].

This literature influenced Brazilian analyses of educational policies in the seventies. One example is the study of Luis Antonio Cunha of education and development in Brazil, which surveyed the educational system and pointed out its role in maintaining social inequalities [39]. Other studies have made a contribution to the analysis of vocational education reforms within the critical perspective of the reproduction theories [40]. These other studies are allied to a criticism of the economic model called "capitalist associated development".

Studies with the specific aim of interpreting education policies within the frame of dependency theories are scarce, however. Two exceptions in Brazil are the major study of Manfredo Berger [41], and a less ambitious study, by Pedro Garcia analysing a specific education plan [42].

In Colombia, the work of Orlando Fals Borda is outstanding in criticising cultural dependence [43] as a
consequence of the economic subordination of Colombia to foreign capital.

The relationship between imperialism and educational policies in Latin America was also the focus of Mexican author Adriana Puiggrós [44], which retraced the historical origins of imperialism and cultural domination in Latin America. Puiggrós extended the conclusions of Ianni, Carnoy and dependency theoreticians to some situations of educational change which, she argued, reaffirmed capitalist interests in the region.

A different kind of analysis, which uses the dependency approach, is the analysis of educational imports in Latin America by Beatrice Avalos [45]. She describes, in general terms, the conditions which led Latin American countries to import educational policies and institutions. Avalos insists, however, that the effectiveness of those imports depends both upon the internal conditions and the active role of the ruling classes in their implementation. This particular point of view is useful to the argument followed here, which will try to make clear the role of internal influences in the educational process, specifically the role of various elites in accepting and implementing vocational education models.

Another line of study, which has referred marginally to the dependency approach, is the analysis made by German Rama, of the current changes and trends in education in
Latin America [46]. Other studies have focussed more on the educational consequences of authoritarian regimes [47]. In both cases, internal factors, such as ideological and political dimensions of educational tendencies in Latin America were overexplored, in comparison to their treatment of the international and external factors. Certainly these, and other works, contributed to a more critical approach to the relation between educational system and government educational policies, but, as has been argued here, the analyses on dependency and education were not extended to concrete situations. Such an extension would clarify some obscure elements in areas such as vocational education, which was adopted by several countries at the same time in Latin America [48]. One can conclude that studies on education and development in Latin America did not explore sufficiently the interplay of the external and internal influences on educational movements.

To sum up, the literature on education and development in Latin America, after the seventies, has focused its analysis very heavily on the internal socio-political structure, at the expense of a consideration of external factors.

External factors were however at the centre of many scholarly studies about educational reforms in Third World countries. Some of these studies have advanced the general discussion, such as the work of Altbach and Kelly [49] on
neo-colonialism and education and Phillip Foster's analysis of vocational education reform in Ghana [50]. However these studies, although offering interesting insights into educational dependence, were applied to a completely distinct reality from the Latin America, in terms of those countries' participation into the world capitalist economy [51].

It would be useful to combine the internal and external forces perspectives, and to illuminate the play of the forces in a concrete situation. Few concrete situations in Latin America have been studied so far, in spite of the suggestions from representatives of dependency that this perspective offers a more solid method of analysis. Analyses of education can make a fruitful use of this perspective, especially in discussing internal practices and policies, (such as educational reforms) in the broad context of the kind of dependent development undertaken by countries with strong capital accumulation, a strong state and an internationalized elite [52].

1.3 Dependency and educational dependence: definition of some concepts

The controversy over dependency analysis in education has produced to some conceptual issues that should be
clarified. In Latin America, as was noted, studies about education tended to concentrate on political and ideological interpretations. The analyses which attempted an overview of the relationship between internal structures and international constraints have been glossed over. Instead, the discussion of the interrelationship between dependency and education, in specific situations, has been apparently led by comparative education studies [53], in a broad international perspective.

In the perspective of this latter kind of study, there are two approaches to educational issues which have used concepts drawn from an economic perspective. One is the analysis influenced by the Marxist point of view, and the other is the theories which supported the idea of education as an instrument for economic development, which appeared in the late fifties and early sixties.

While the Marxist analysis of education [54] concentrated more on the effects of economic and social structure on educational practices and the hierarchy of educational systems, the economic theories of education concentrated on providing a view of education for development [55].

These latter ideas were summarized by the human capital theory and the manpower studies approach [56], both of which rely on economic perceptions of educational phenomena to provide a basis for educational planning.
methods. The main rationale of these theories has been that education would be an important factor in economic development and productivity. Through the "residual factor" in the economy, one of the authors of this school, Theodore Schultz, argued, that the individual and, consequently, society would benefit from the increase of earnings brought about by education in developing societies [57].

Under this rationale, various reforms and educational programmes were set up. Special emphasis was given to vocational education, which was construed as a useful tool to prepare skilled workers for development in different areas of Latin America [58]. These theories relating education to development were part of a specific theory of development called "modernization", and through a series of economic and social policies, these ideas were adopted by Latin American countries in pursuit of economic growth [59]. The theories of economic dependency were opposed to modernization theories and the outcomes of the debate were also extended to the educational field [60].

Some authors such as Cardoso and Evans showed that some countries, although they have been economically dependent on foreign capital, managed to achieve capital accumulation and a certain degree of development [61]. Cardoso's analysis of the more advanced Latin American countries in terms of capital accumulation and industrialization, and Evans' major study of Brazilian
development suggested one way to understand the interplay of external and internal factors as the real determinants of socio-economic structures in Latin America.

To extend the conceptualization of dependent development to educational analysis in dependent societies, the state and its relationship to education is noted by this thesis. This supplements early theories about the social function of education, by offering a new emphasis on the state's role in education. The state can develop specialised and cohesive institutions that appear to be public, impartial, and superior to the struggle among private economic interests [62]. As a consequence, the state plays a decisive role in the introduction of educational reforms, with the aim of helping certain groups (within the state) achieve their purposes, but which are apparently tailored to benefit society as a whole. (This argument will pursued mainly in chapters four and five).

In the field of educational analyses, a more refined approach to education and the state has been provided by Louis Althusser [63]. Although he has been criticized for giving the state a "relative autonomy" (from the class struggle perspective), his approach to the ideological role of education as "an ideological status apparatus" is useful. It is possible to unveil the contradictions between education's proclaimed aims and education's achievements.
and the significant role of education for the state. The perspective of education as a "state apparatus" adds a new angle to the analysis of educational dependence. This illuminates the role of state in the adoption of educational policies borrowed from outside and their implementation. Such procedures will be discussed in chapter two and four, when applied to the concrete situations of Brazil and Colombia.

Finally, the studies of education as a means of the reproduction of social relations of production in capitalist societies [64], are used in this thesis. Whilst they complement the dependency perspective, they are useful for analysing the internal aspects of the transmission of foreign values and models to serve the maintenance of capitalist development [65]. The fact that these studies generally were undertaken in developed capitalist countries often makes them less suitable for analysing developing countries, mainly because they incorporate the class assumptions of the industrialized societies [66]. However, they provide useful concepts for analysing educational structures which follow foreign patterns. Reproduction theories are accepted here when they are able to show that the school in capitalist society obeys the logic of the capitalist class relations not by mirroring production relations and labour organization directly in the classroom, but maintaining its own
form of educational hierarchy, specialization and control [67].

1.4 Educational institutions and educational reforms as effects of specific situations of dependency

This section will discuss educational imports, whether they be institutions, practices or pedagogical beliefs, as outcomes of a model of economic development. Therefore this section will add a new theme to the debate on educational dependence: the interplay of external and internal groups' interests, for the incorporation of educational programmes, as a consequence of the situation here characterized as "dependent development".

It is suggested here educational policies were introduced together with other mechanisms used by international capital apparatus to sustain Latin American alliances with external partners. Such instruments were financial loans, infrastructure projects and agricultural projects, and military aid. It is also argued that these imports through assistance programmes, co-operative projects, and loans to education, do not directly cause the situation known as "dependence". Instead, they are a means to preserve the dependence caused by other factors [68].
Accordingly, this thesis suggests that it is not appropriate to talk about the "machinations" of the developed world to use education to provoke dependency or alienation of the elites. On the contrary, local elites' adherence to foreign values pre-exists the introduction of educational policies such as vocational education.

The effects of dependency in education can be established by analysing the educational reforms introduced during the 1960s and 1970s, paralleling the acute phase of the capitalist integration of Latin America [69]. These policies although they were supposedly created to stimulate changes were not be able to do so. To be effective these reforms required a restructuring, not only of the educational system, but of the whole social system. The educational reforms, however, tended to perpetuate the old elitist structures.

Several studies have analysed the most significant and ambitious programme in that direction: the Alliance for Progress [70]. In contradiction to the beliefs of the "progress" to be achieved through social reforms, those policies became a means to preserve social inequalities, "rather than 'a stimulant to accelerate reform'" [71].

Various studies have shown the alliance between local elites and international capital, and how the general political situation has been such as to favour foreign investments and reject nationalistic views [72]. This
situation was prior to the educational system reforms: thus the conclusion here points to educational importation as an effect of dependency [73].

Cultural and educational ideas and practices also worked as a tool to prevent economic dependency being restrained or opposed. This has been the conclusion of studies of some the education reforms carried out in Latin America, such as those of José Arapiraca [74] in Brazil and Gilbert Gonzalez in Colombia [75], among others. Educational policies, in these situations, are not agents of change but agents "of stasis, equilibrium and the perpetuation of the dominant elites rather than of growth and change [76].

To sum up, it is suggested that education policies are less a cause of dependence and rather that dependence precedes the introduction of education reforms which copy external models.

1.5 Brazil and Colombia: two examples of dependent development and educational importation

This section, following earlier analysis, will summarise the probable relationship between the process of dependent development and the educational systems of Brazil and Colombia, in order to proceed to the
interpretation of the role of vocational education in these societies.

The basic assumptions of the theory of "dependent development" have been drawn from the analysis of the interplay of industrialization, the role of local governments, and the alliance between the social classes and the state. According to this view, the dependent industrialization of the two countries, which occurred under the same kind of influence, brought about similar effects. Each country, however, reacted differently to the flow of investments and external aid [77]. In most of the Latin American countries, the new situation brought about great inequalities and provoked new divisions in society.

Local governments were found in an unbalanced situation, when the countries became "unable with their own resources and techniques to produce a rate of development satisfying to the wakened masses" [78]. The result of this imbalance was an appeal to overseas actors and agents and the simultaneous promotion of internal political changes. Countries like Brazil and Colombia relied upon foreign investment to achieve economic development in the sixties, and as a consequence had to cope with internal and external demands at the same time.

In Brazil, the development policies of the state and various elites tried to meet the needs of a rapidly growing population with a set of measures to facilitate "associated
capitalist development". In Colombia, similar policies were still more evident, given this country's lack of sufficient internal capital accumulation [79].

The result of the two countries' economic dependency was complex: they were subject to external pressures and at the same time their local political and social unrest gave way to the decline of democratic freedom [80]. Foreign support became more necessary to improve internal institutions. As a consequence, foreign aid and loans were channeled to the governments not least because it was important then to create a climate of peace and stability for investors, including overseas investors. When the association of local capital with big corporate and multinationals companies took place, foreign aid, led by the United States-inspired Alliance for Progress was offered to Latin America with the stated aim of promoting "social reforms, economic development and political democracy" [81]. The educational dependence which followed was linked to the introduction of educational programmes or packages of reforms and experiments, such as vocational education, radio and T.V. literacy classes, and other educational innovations.

This chapter has attempted to offer a review of concepts and the main assumptions of dependency perspective, arguing the need to combine the economic
dependency theories with the theories about the relationship between the state and education in capitalist societies, for the purpose of analysing vocational education policies in Brazil and Colombia.

It has been suggested that although some attempts have been made in this direction, the analysis of vocational education reform could be more specifically explored. The assumption here is that those reforms began and fitted well with the modernization ideas, then promoted both internally and externally.

The less developed countries' adoption of metropolitan patterns of organising educational provision was an outcome of financial and technological imports or lack of a local alternative: studies have suggested that financial aid comes first followed by cultural models. Educational policies, including vocational education reforms are part of these cultural models - and are often framed by foreign policies. This will be analysed specifically in chapter three.

In cases that will be exemplified by Brazil and Colombia in the following chapters, the association of local capital gave a new dimension to the process of development. In this context, the state and the various elites played a substantial role in developmental policies; consequently, they were able to counterbalance external influences.
NOTES AND REFERENCES


2. Most analyses of dependency started from this point. The original works on dependency have been revised by Randall and Theobald, op. cit. pp. 99-136. See also Roxborough, chap. 5, pp. 55-69.


7. In the words of Chilcote, "The literature in dependency moves in many directions and criticisms emerge from a variety of ideological positions". He then provides a review of the tendencies and positions. One was that formulated by Helio Jaguaribe: dependency will be overcome by autonomous national development and non-revolutionary change. This view of dependency has been criticized by Frank, Teotonio dos Santos, and Cardoso. The second tendency incorporates analysis of international capitalism in its monopolistic phase, offered by economists such as Paul Baran, Paul Sweezy and Harry Magdoff. The third tendency is Cardoso's contribution which identifies dependency as an "historical-structural process in terms of class relations". See Chilcote, op. cit., p. 7.

8. The first analyses showing this new approach came from ECLA - the United Nations Economic Commission for Latin America and its chief economists Celso Furtado and Raul Prebisch. See Randall and Theobald, op. cit. pp.104-5; and Ian Roxborough op. cit. pp.27-41.

9. Teotonio dos Santos "The changing structure of Foreign Investment in Latin America", in James Petras & Maurice


11. Ibid., p. 910.


13. Ibid., p. xviii.


15. See Gabriel Palma, op. cit. p. 910.

16. Ibid., p. 911.

17. The interrelationship between the various classes and the state in dependent development is stressed by Randall & Theobald, op. cit. p. 140.


19. Ibid., See also, Gabriel Palma, op. cit., pp. 909-910.

See also F. H. Cardoso, *in* Hamza Alavi and Teodor Sanín (eds.), *op. cit.* pp.112-27.


25. For a critical appraisal of the Marxist debate on social class, see Ian Roxborough, pp.70-90.

26. The studies analysed by this chapter were chosen as examples of the current different approaches to the subject that is being discussed here. For an overview of educational analyses in Latin America see Germán Rama *Education, Images and Styles of Development*, UNESCO, CEPAL, PNUD, Paris: Unesco, 1978.

27. The leading works in this line of analysis in Brazil have been Barbara Freitag, *Escola, Estado e Sociedade*


30. See discussions in the above quoted work by Keith Watson. See also the papers presented at the Institute of Education Conference on Vocationalizing Education, May, 1986.


34. See Martin Carnoy, Education as Cultural Imperialism, New York: David Mckay/Stanford University, 1974. Carnoy's work was the first to make these remarks about educational export by the United States, which has had influence in Latin America.

35. The work of both Ianni and Carnoy have been influenced by the works of Paul Baran and Harry Magdoff. See Carnoy, op. cit. p. 311.

37. Ibid., p. 310.

38. Ibid., p. 311.


40. Two examples are Luis Antonio Cunha, Política Educacional no Brasil: A Profissionalização do Ensino Médio [Educational Policy in Brazil: The Professionalization of the Middle School], Rio de Janeiro: Livraria Eldorado Tijuca, 1972, and Mirian Jorge Warde, Educação e Estrutura

41. See Manfredo Berger, op. cit.


47. Those studies referred to educational situations under the authoritarian governments, without exploring its international dimensions. Two examples are: Graham Howells "Ideology and reform: The effect of military government on education in Brazil" in Roger Garret, Education and Development, London: Croom Helm, 1983.


51. A solid contribution to the analysis of the effects of industrialization in those kind of countries can be found in Manfred Bienefeld's article "Dependency and the Newly Industrializing Countries- Towards a Reappraisal", in Dudley Seers (ed.), Dependency Theory: a critical reassessment, London: Frances Pinter Ltd., 1981.


57. Ibid.

58. See Carnoy, op. cit. pp 358-359.


65. Two studies that provide illustrations for the main assumptions in such a line of argumentation are: Madan Sarup op. cit. and Stuart Hall, "Schooling, State and Society", in Schooling and Society, Milton Keynes: Open University Press, 1977. Another overview of these theories is in Barbara Freitag, op. cit. pp. 15-43.

66. These theories have been extensively used in recent Brazilian educational analysis, such as the two major surveys about educational thinking in Brazil: Alicia Ricardi and Ingrid Sarti's, Educação, Ideologia e Estrutura Ocupacional [Education, Ideology and Occupational Structure], Rio de Janeiro: IUPERJ/FINEP, (survey report) 1979; and Acacia Zeneida Kuenzer, Educação e Trabalho no


69. For an analysis of the effects of educational policies in Latin America during the process of development, see Alberto Moncada, La crisis de la planificación educativa en América Latina [Crisis in educational planning in Latin America], Madrid: Editorial Tecnos S.A., 1982.


72. See Martin Carnoy, op. cit. p.3 and p.312.

73. This kind of remark has been put forward by all the dependency writers here cited. Dependency is a historical condition which, when it occurred, also allowed the
transfer of educational and other cultural elements from the more advantaged to the less developed countries or areas.


76. Paul Hurst, op. cit. p. 106.

77. J. P. Morray, op. cit. p. 106.


81. See J.P. Morray, op. cit. p. 100.
CHAPTER 2

SECONDARY EDUCATION IN BRAZIL AND COLOMBIA: AN HISTORICAL OVERVIEW

The purpose of this chapter is to explore the relationship between the reforms of vocational education and national development policies in Brazil and Colombia. This chapter will deal with three aspects: i) The evolution of the present socio-economic structures in Brazil and Colombia, in the context of Latin American dependent development; ii) the consequences of this evolution for the educational systems of the two countries; iii) the interplay of external and internal influences on the restructuring of the educational systems in relation to the economic development in both societies.

Since the main concern of this thesis is secondary vocational education, this chapter will deal with different reforms undertaken at that level, subsequent to the process of industrialization and social changes in the second half of this century.

Following the central argument of this thesis outlined in chapter 1, it will be argued in this chapter that in dependent developed societies, such as Brazil and Colombia, reforms aimed at vocationalizing the secondary education system are a result of internal and external factors combining in a situation of "associated development" [1].

It will also be argued, that the class formation in
dependent societies, specifically in the two cases under examination, did not allow the development of a democratic educational system. Education in both societies was not developed until the two countries' economies and the internal socio-political structures of those societies began to change as a consequence of industrialization.

According to the dependency approach, which this thesis is following, in a situation of dependence the educational system, in countries like Brazil and Colombia, was affected by the developmental policies. Moreover, external links between the economic elites and international capital were a crucial factor in the orientation of economic development and educational change in the two countries [2]. The policies of economic development carried out by an elite connected to foreign trade favoured the adoption of foreign ideas, models and practices, as well as the restructuring of the whole administration of the state.

Within this line of interpretation this chapter tests three major arguments, with a number of subarguments in the next subsections for Brazil and Colombia respectively:

Firstly, the educational reforms in general, and specifically of reforms of secondary education, reflected the interplay of the economic elite and the state to meet the demands of economic development in Brazil and Colombia.

In Brazil, the evolution of secondary education and consequently the introduction of vocational studies, was
dependent upon the interrelationship between the consolidation of industrial capitalism, the emergence of a belief in education as a means to achieve economic development, and the emergence of policies proposed to prepare the pupils for productive work. In Colombia, the educational reforms proposed by the government especially in primary and in secondary levels, from the 1930s onwards, were closely connected with the economic and socio-political evolution of the country towards modernization.

Secondly, in both countries, educational reforms resulted from internal demands but were shaped with external help. The internal process of economic development internal process had to adjust itself to the functioning of an internationalized economic structure. Thus, within Brazil, policies on vocational education aimed to provide the country with a new kind of work-training needed for economic expansion, as well as providing a work-force qualified for the externally-based modern sector of industries. Within Colombia the series of secondary education innovations introduced mainly after the 1960s, were influenced by ideas from outside the country, as the Colombian elites wanted to pursue economic development helped by foreign investments.

Thirdly, the structure of classes in these societies underpins the access of the population to the different levels and types of schooling. In Brazil the character of its social structure, where the maintenance of privileges only allowed few concessions from the economic elite to the lower classes,
caused poor provision of education from the time of colonization until the 1930s. Since then, in Brazil, education was seen as instrument to preserve social order and to help economic development. In Colombia, the government's concern for education only began with the development of new socio-economic conditions after 1930. The educational reforms introduced by the government attempted to democratize secondary education and to allow more pupils coming to schools; however the system remained relatively inaccessible to most pupils, in spite of vocational education reforms.

Overall, education as an agent of modernization was intended to permit the urban middle classes and the urban working classes to fill positions in a new occupational structure. Educational structures - including vocational education - were construed by the governments as a means to allow the urban masses a level of instruction needed in a society undergoing modernization.

In Brazil and Colombia, from a poor education base, the governments attempted to make the educational system fit an accelerated process of economic development - a process behind the movement towards educational reforms which occurred all over Latin America during the sixties [3].

To organize these arguments, the first part of this chapter will survey the historical conditions of Latin American development, and the character of national development policies in each particular country. It will describe the several educational reforms which were introduced
after profound changes in economic, and political, internal forces.

The second part of the chapter will deal with the evolution of educational policies in Brazil, and specifically the way the public system of secondary schools began and developed. It will look at the evolution of the educational system in Brazil in relation to the process of socio-economic development, in order to understand the reforms which introduced vocational education.

The third part of the chapter will deal with the historical evolution of the Colombian educational system, and will discuss the general development of the secondary school system in Colombia in relation with the internal social structure and the economic changes which occurred in that country after industrialization. The final sub-section, will discuss the educational reforms leading to vocational education in recent years.

2.1- Education and Economic Development in Latin America

The purpose of this section is to establish the relationship between national development and modernization policies, and the movement towards educational reforms, during the 1970s.

The international influence on Latin American economic development was expressed through national development
policies directed by the elites in charge of the economic
development and also through the work of the international
agencies [4]. As the discussion of dependency has shown in
chapter 1, the strategies used by foreign investors to
safeguard their interests in Latin America, coincided with the
adoption of developmental policies by local governments with
the support of international agencies. Such policies have
affected the internal restructuring of many essential aspects
of local administration.

Education was part of the countries' internal
restructuring through both general and sectoral planning and
through legal reforms aiming at modernization. This whole
process was part of the larger process of dependent
development.

This suggests that educational reforms resulted from
internal demands, but they were shaped with external help.
Equally it suggests that economic development was an internal
process which had to adjust itself to the functioning of an
international economic structure. This indirectly affected
educational programmes and was to be reflected into the
efforts to bring education closer to economic development.

The process of industrialization, which affected countries
like Colombia and Brazil, followed a different path when
compared with other parts of the world [5]. Industrialization
was first prominent during World War I and II with the
objective of "Import substitution". After the 1950s, industry
grew faster with big corporations coming to establish
themselves in those countries [6]. This new kind of industrialization affected local socio-economic structures. New governmental policies, including educational policies, were established to allow this kind of economic expansion.

With respect to such policies, there are some common points between Brazil and Colombia: i) both countries adopted programmes for secondary school curriculum diversification; ii) both received foreign advice and financial assistance for the improvement of vocational school systems; iii) both tried to change the traditional academic character of secondary schooling through in-depth institutional reforms; iv) the administration of Colombian and Brazilian education became more centralized through legal reforms; v) both Colombia and Brazil shifted from a traditional agricultural export economy to a modernized industrial economy.

In the light of these similarities, it is suggested that the restructuring of educational systems, in both societies, was part of the economic and social changes occurring within the dependent development framework. These reforms were also connected to the doctrines of national development and economic growth [7].

Industrialization also provoked the emergence of new social alliances, new demands on the state and new political movements, such as populism [8]. This was one of the effects of the growing power of the urban middle classes and, the urban working classes. These economic, social, and political circumstances provided the local framework for the educational
reforms.

Economic development, however, was not possible without foreign investments and a series of measures to assure their functioning in these two countries. Large companies were established in Brazil and Colombia, and the introduction of a modern industrial sector put new demands on public services such as energy, transport, and communications. All these sectors had to be improved to provide a basis for economic development [9].

This phenomenon was supported by a doctrine of economic growth. It was suggested, by a number of economists from the industrialized countries and by some from Latin America, that rapid economic growth through substantial capital accumulation and industrialization would transform these societies into "modern states". Following this belief, education was seen as one of the "inputs of modernity" among other factors such as capital and manpower [10].

As a consequence of national development policies during the 1960s, enrollments in secondary education showed a remarkable increase in Latin American countries. The rates for Brazil and Colombia were 11.4% and 10.8% respectively, (compared to an even higher rate, 16%, for Mexico) [11]. The education policies, adopted by the Latin American countries, were intended to provide a major restructuring of the educational systems as a way to meet the economic and social changes brought about by industrialization [12].

In spite of the increase of enrollments in the sixties at
the secondary level, educational expansion alone not a sufficient indicator of development, according to the documentation of international agencies [13]. The new concept of development, defined by human capital theory, and disseminated by planners demanded an in depth reformulation of the educational system as a whole.

The 1970s brought major changes in educational policies in many Latin American countries. The main purpose of these policies was to change the character of secondary education. Most countries tried to establish reforms that included vocational or diversified curricula at that level of schooling. At first sight these reforms seem to share some similarities, especially in their aims [14].

The reasons offered – for the diversification of previously academic secondary schools, and the introduction of practical subjects with vocational aims – were that the traditional model of the secondary school could not respond to the demands of "modernised and democratic nations" [15]. According to these ideas, assimilated internally by the governments, national development demanded more and more skilled and technically-trained workers.

Therefore, it is understandable that, when vocational education programmes were proposed by planners and by educational reformers, they were welcomed by those who made the decisions in both countries.

The movement towards educational reform was part of the effort to adjust the Latin American social structure to the
exigences of modern capitalism. After the sixties, the education sector's achievements became one of the indicators of social and economic development cited by economists and planners, under the modernization rationale, as can be seen in the documentation from planning offices and international agencies [16].

The correlation between education and economic development was expressed by the resolutions from UNESCO's Regional Conferences in the early sixties. For example, the Santiago Conference on Education and Economic Development, in 1962, established the ratio of enrollments in secondary schools as the criterion which indicated social and economic progress in each country in the region [17]. Latin American countries were thus divided into three categories: Brazil was in the first group, with an enrollment ratio of less than 13% of the age cohort in attendance at secondary school; in the second group, 13% to 25% were Colombia, Costa Rica, and Cuba; the third group comprised countries where the ratio of enrollments was higher than 25%: Argentina, Chile and Uruguay [18].

It has been suggested that the movement to reform education in Latin America in the sixties and early seventies, was to make them fit the purposes of a new stage of economic development, known as "late capital accumulation" [19].

Efforts to modernise education along these lines were clearly visible at the UNESCO's Fourth Regional Conference on Education, held in Venezuela in December of 1971 [20]. Significantly, that was the first conference in the region to
bring together the Ministers of Education and planners for economic and technological development in the Latin American countries. The favoured subjects of this Conference were democratization and educational innovation, secondary school reform, and the reform of teaching in science and technology [21]. The Fourth Conference recommended secondary school reform in the direction of training-for-work as a means of responding to the requirements of economic development in the region.

Overall it is being and will be suggested that vocational education in Latin America evolved in line with the different stages of industrialization, and that secondary educational systems under the impact of international agencies were to be changed and modernized.

2.2- Education in Brazil

This subsection analyses the structure of Brazilian education when industrialization began to transform society in the 1930s [22].

It is argued that only after the growth of the urban middle classes, which brought them new political power, did the state start to be concerned about providing education. Educational reforms, it will be argued, were to aid the economic and social changes then in progress. It was during the period of the "national development" that progressive educationists became supporters of educational innovation to
meet the requirements of a modern society [23].

The industrialization of the country also opened new opportunities to new social groups through the increase of middle level professions. At this point, populist governments tried to offer more political participation to the middle and working classes. As urbanization and political participation progressed, education came to be regarded as worthwhile, both by the government and by urban social strata.

To test this overall argument this section will be subdivided into four subsections. Subsection 2.2.1 will discuss how education started being developed when the country began industrialization, at a slow pace until the end of World War II; subsection 2.2.2. will identify the first evolution of vocational education, during the period characterized by a nationalist approach to development; subsection 2.2.3 will look at secondary school innovations aimed at bringing a more practical curriculum to this level, which were put forward in a moment of crisis in the political scene as well as in the economy; 2.2.4. will describe the later reform of secondary education which brought vocational curriculum into the mainstream of the educational system.

2.2.1. The evolution of the educational system
This section will provide a basis for understanding the causes and the nature of policies on vocational education in the Brazilian context.

It will be argued that the educational system in Brazil only became consolidated after the development of industrialization during the fifties. Since then three factors have affected changes in secondary education: i) the increase of the demand for more schooling in general; ii) the need for middle-level trained workers; iii) foreign assistance favouring the introduction of reforms at this level.

The period in which educational development started coincides with the beginning of industries which were sponsored by the Brazilian government. Both industrial and educational development were outcomes of the first pro-modernization movement in the country, known as the 1930 "Revolution" [24]. Before the 1930s, the poor provision of education from the time of colonization was the result of the class-based educational structures of the country. Initially, an economy based on slavery and patriarchal society required only a few educated people to run the state machinery, even after the Republic was established in 1889. After the thirties, when industrialization increased, patriarchal and elitist attitudes continued to dominate the Brazilian political scene and consequently there was not much progress in
the democratization of education [25]. This brought two characteristics to the evolution of education in Brazil: i) access to education has been a problem in Brazilian society, strongly influenced by social class division; ii) education provision has changed only after changes in internal economic and political structures [26]. The provision of education (during the period following the proclamation of the Republic) increased slowly, supported by the states under the decentralized Constitution of the United States of Brazil.

This situation did not change drastically the development of industry during and after World War I. Then there was an increase in the number of industrial workers, which doubled between 1907 and 1921 [27], but the Brazilian economy remained attached to the production and export of raw materials and agricultural products until the World War II.

As a consequence, "there was no great demand for the skills that produce and maintain a modern technology" [28]. People with middle-level education were employed in commerce, in the civil service, and in educational institutions.

Nevertheless, social movements in the early twentieth century in São Paulo showed that, at least in the urban areas, an increasing number of working people
expected improvements in their living conditions [29]. Furthermore, Brazilian researchers, such as Aparecida Jolly Gouveia and Otaíza Romanelli, among others, have suggested that the emergence of new social strata which followed the increased diversification of the economy, particularly in urban centres like Rio de Janeiro and São Paulo, played a role in launching movements to improve educational provision [30].

By the 1920s Brazilian educationists, some of them graduates from the USA, initiated a movement in favour of improvement of educational opportunities in the country. Some of the states adopted educational reforms following the new pedagogical ideas borrowed from foreign countries. In 1932, these ideas came to public attention in a document called Manifesto dos Pioneiros (The Pioneers' Manifesto) [31].

There were, then, pressures for improving education before World War II, but they were not decisive for the introduction of major policies on vocational education, designed to meet the demands of the changing economic structures [32]. The initial effect of this early industrialization was an emphasis on broadening access to secondary school to prepare more youngsters to enter into higher education. There were only some small attempts to establish secondary technical schools in the 1930s [33].
During the 1930s, vocational education remained a "second order" education, available to the "less privileged" youngsters [35].

In the period following 1930, there was an increase in the number of urban workers [36]. These workers compounded the concern of the state for education which had increased as a consequence of the new alliance of classes, which supported the 1930s revolutionary movement [37]. The new politics of the country responded to the new socio-economic realities, giving to the enlarged urban middle classes, and to an increasing urban working class, new opportunities of political and economic integration in national life, and in education [38].

Within these developments, influenced by the kind of industrialization which aimed at "import substitution", a new industrial class began to put pressure in the government to provide conditions for the development of manufacturing. With World War II these industrialists became a strong pressure group inside the government. Equally, industry was responsible for a more diversified occupational structure and a serious shortage of skilled workers emerged. These changes in the economic structure of the country put new demands on to the state, because industrialization was closely dependent upon the state's support [39].
As a direct consequence of economic and political pressures, the Brazilian state underwent a reorganization which was prolonged during the 1940s and culminated in the 1950s. This period coincided with the charismatic leadership of Getulio Vargas, who installed a nationalist dictatorship following the closure of the Congress in 1937 [40].

During the new political regime called Estado Novo (New State), many measures were taken which affected public education [41]. Some examples of the Estado Novo's policies were: the compulsory teaching of crafts and civic education in primary, secondary and teacher-training education; the obligation for worker's unions and industries to provide work-training for their members and employees; the promotion of vocational and pre-vocational education as a state responsibility [42].

However, secondary education remained a humanities-based course. Technical and vocational programmes were addressed to the children of the working class by government regulations. These emphasized the role of vocational education as a means to improve the social conditions of workers as well as its importance for social and economic development [43].

Studies have shown that education policies during the Estado Novo had a precise aim: to guarantee the national development of a efficient work-force [44].
Thus, the reforms of middle level and high education aimed to prepare the professional classes. At the same time the government created apprenticeship and technical schools to answer demands from industry and from the urban working classes looking for schools.

The number of enrollments in secondary education, during this period, confirms its elitist character. While the academic secondary schools expanded, the government only gave attention to developing technical education in 1942 [45]. The majority of secondary academic schools were private (70% of the enrolments by 1938), but vocational education in the apprenticeship schemes was free and the students received a small grant [46].

Overall, then, this section traced how educational provision in Brazil was affected by its internal socio-economic and political structure. Although the country started to industrialize and experienced some prosperity between the two World Wars, it was characterized by a highly hierarchical social structure. Despite this, there were certain changes in the political participation of the urban working and middle classes and some concessions were made to them. Educational reforms were one consequence.

However, the educational system, introduced by the 1942 educational legislation, was not sufficient to cope with the necessities of a modernized society. The main emphasis of the legislation was to provide an education for leadership. The preparation of a modern and well-trained industrial labour
force was a secondary objective [47].

These policies were undertaken in a context where the dependent character of the development at that stage was still fluid; the period known in the literature as "import substitution" was characterized by the utilization of foreign capital and technology for internal purposes; educational policies were proposed with conservative aims and contributed to the maintenance of social divisions with one system for the wealthy and another for the "poor".

It is suggested that major change to the education system would only be possible, when the process of modernization and industrialization accelerated. To test this argument, the next subsection will look at the initiatives which were taken when there were major new developments in the economy.

2.2.2- The evolution of vocational education: from the beginning of "import substitution" to the period of "national development"

This subsection will discuss the kinds of educational reforms, including the initiatives on vocational education which took place during the 1950s in Brazil. This period was marked by two different governmental attitudes in favour of industrialization: one was nationalist and the second although preserving national development aims turned more to foreign
The period under discussion comprises two phases: Vargas' second term in power, from 1950 to 1954 and President Kubistchek's government from 1955 to 1960. The first was in office when the industrial expansion began with a nationalist character. The second phase, under President Kubistchek, tried to continue the expansion of industry and national development, supported by a doctrine developed inside the country known as desenvolvimentismo [49].

This subsection argues that: i) the industrial development of Brazil had an important effect on the urban middle classes and the urban working classes; as a consequence these groups started to demand more and better education; ii) with changes in the economy and in the social structure, the tradition of an academic secondary school for one small dominant group of society started to be questioned; iii) during the period under examination in this subsection, the three factors on which dependent development is based, were actively present: the state, trying to keep an alliance with the middle and upper classes, the dominant economic elite influencing the policies of development and, finally, the international agencies and foreign investors giving advice and providing finance for development.

In the fifties and sixties, Brazil had met a great challenge to create an industrial economy [50]. This historical fact must be put in relief because the effort to achieve this aim required internal and external support for
development policies. *Desevolvimentismo* emerged during the 1950s and grew during the 1960s as the internal ideology to support the build up of a strong industrial national economy. In 1956, President Juscelino Kubistchek launched the slogan "fifty years in five", establishing an ambitious government plan supported by external financial assistance. For many authors, President Kubistchek's term of office represents the period of consolidation of modern capitalism in Brazil [51].

This section argues that the character of Brazilian social structure, where the maintenance of privileges allowed only a few concessions from the economic elite to the lower classes, brought about an alliance of forces to preserve social order. Education would be one of the instruments for this alliance.

During the populist period, under both Vargas and Kubistchek, it was expected that government policies should meet the interests of the lower classes. However, educational reforms or even the expansion of school opportunities were not tackled by the policy-makers during the first stage of economic expansion, although some innovations in this field were attempted.

External influences over internal policies were established on to assist sectors other than education. During the 1950-1960 decade, foreign influences on education were not too obvious, although some programmes were under way at technical education and primary levels [52].

This subsection will contextualize the innovations
that were proposed for education. They were of two kinds: the first, stressed a progressive line of reforms intending to democratize access and content at the same time; the second was in favour of improving vocational and technical education parallel to the regular system of education.

Industrial expansion in Brazil, during the period under examination in this subsection, brought about new pressures on the expansion and improvement of education. So, the economic diversification, that Brazil underwent during the sixties, had to rely on newly formed professional and technicians, as well as new institutions [53].

The government was asked, both by industrialists and intellectuals, to provide an educational system more adjusted to the new conditions of the country [54]. Hence, the first idea of the government was to re-organize the whole education system through legislation. However, the first national education law [55], which could have been a great step to increase access within a selective system, was hampered by the representatives of conservative groups in the Congress.

During this decade a number of analyses from educationists and social scientists identified the gap between education and the pursuance of economic development by the country [56]. Brazilian educators offered two kinds of solutions to diminish the gap: a nationalist approach to educational reform, accordingly to the ideas sponsored by the "national development" doctrine, and a more internationally-based
response, following foreign influences that already permeated educational thought in the Ministry of Education [57].

Challenges posed to Brazil after two decades of industrial expansion, were pointed out by an American observer from Department of State in 1959:

Owing to Brazil’s marked expansion of the past two decades the country experienced an acute demand for commercial and industrial education. This development, according to Brazilian educational leaders, is another development which has pointed up the need for extending educational opportunities to an increasing number of people. Industrialists and businessmen have united forces to lend support for schooling at all levels, but with emphasis at the elementary, commercial and industrial levels. The government is being assisted by private agencies in its educational problems [58].

The new educational reforms were, first, an attempt to democratize the whole educational system and second, a movement directed towards a re-unification of secondary school, which was made up of separated branches: industrial, commercial agriculture and academic [59].

Secondary school structure after the 1942 legislation remained a closed system of distinct branches and an obstacle to non-academic secondary school leavers who wanted to go onto
higher education in the universities. This problem was tackled by those responsible for secondary education within the Diretoria do Ensino Secundário (Secondary Education Directorate) through various policies during the 1950s. This division of the Ministry of Education tried to devise policies to make the system of secondary education more flexible [60]. With new demands coming from the urbanized lower and middle classes, a revision of the Estado Novo's education legislation had to be considered.

By the end of the 1960 decade, coincidently with the decline of populism and nationalism, the government attempted to introduce some secondary school innovations which were closely connected with future vocational education policies. These discussions were proposed both inside and outside the governmental offices.

Studying the educational policies at secondary level, Clarice Nunes distinguished a conflict between liberal and conservative sectors within the educational bureaucracy, as part of the struggle for education democratization in Brazil [61]. While the conservatives, identified as an authoritarian and centralizing group, wanted the maintenance of the division of secondary education into separated branches, the liberal sector was trying to modernize the educational system in accordance with the new economic and social changes.

Mirroring the vacillating attitude of populist government over social demands, the policies devised by the Ministry of Education during the period between 1950-1961 are illustrative
of the government's lack of clarity on educational matters [62].

As far as secondary education issues were concerned, within the Ministry, the DES, Diretoria do Ensino Secundário (Secondary education Directorate) was influenced by the conservative group, whereas the Technical, Industrial and Commercial Education Directorates were much more progressive [63]. Understandably, when the stress on economic development became stronger, the DEI, Diretoria do Ensino Industrial (Industrial Education Directorate) became more prestigious within the Ministry's bureaucracy. Some modifications were, then, introduced into the rigid structure of secondary education. After 1953, transfer was made easier among the various types of secondary education, allowing graduates of commercial and industrial schools to continue their studies in an institution of higher education [64].

In contrast to the difficulties with the democratization of access for the lower strata to secondary education, Brazil saw during the period under examination an expansion of the academic secondary level [65]. This was a result of social and political demands, but was an inadequate response to the needs of a changing society. Brazil, as a consequence of the oscillating measures taken by central government, was not prepared for the increasing demand for secondary education in the 1950s and 1960s and demographic expansion was not matched by number of enrollments [66].

Following international standards, which were already
being disseminated, a new kind of secondary education was put forward by the governments to fit an increasingly industrialized society. The intention was to provide the means by which workers would become qualified, as required by the modern sectors of industry, and also to enhance the future employment opportunities for the urban middle strata [67].

Nevertheless, in spite of the expectations introduced by the doctrine of national development and supported by populist government, the expansion of secondary education occurred more frequently through private initiative rather than by the state. This situation prevailed until the sixties, when the federated states began to give more attention in building a larger number of secondary schools [68].

At the same time, Brazilian educationists tried to find different solutions for the poor provision and inadequacy of secondary education. The liberal-progressive sector within the state judged the unco-ordinated expansion to be a mistake. These groups insisted on an expansion of educational opportunities, through the re-orientation of secondary education aims: work-orientated curricula were tentatively introduced and emphasized at local level [69].

A new reform movement then occurred. It tried to reconcile industrialization, urbanization and educational democratization, e.g. give more places in schools to the lower strata of population. A reform of Industrial Education was proposed: experimental centres linking education to industry were created under the inspiration of the leaders
from DEI, the Department of Industrial Education, the division of MEC in charge of technical education. These curricula innovations were intended to provide training in practical skills to youngsters [70].

The educational debate at this point was joined by two important forces: the CBAEI, the Brazilian-American Committee for Industrial Education, and the CBI, Confederação Brasileira das Industrias (National Federation of Industry). Both of them emphasized the necessity of introducing a more work-orientated character in post-primary education [71]. Thus the conservative group established within MEC joined the debate.

Thus one of the places where the debate was re-activated was the Ministry of Education, where the two groups proposed the re-orientation of the Brazilian educational system. Representing progressive and conservative tendencies respectively, these two sectors were equally influential and the balance between them prevented the introduction of real innovations. Consequently, few changes in education followed the changes in economy and in society for this period.

Thus, although the introduction of vocational elements at the secondary curriculum was attempted, the path towards a pre-vocational curriculum was slow and difficult, and required a new crisis for further change.

2.2.3. Innovations in secondary school during the late populist period: 1961-1964
This subsetion will look at the effect on secondary school policies of the political and economic changes in the Brazilian model of development after 1961.

This sub-section will argue that the new social and economic crisis which accompanied the impasse of the populist government in a context of late industrialization, had its effect on educational policies.

In 1961, to continue to develop, the Brazilian industrial sector and the state had both to take some decisions affecting the alliance between the populist state, the economic elites and the lower strata. At this stage, it became difficult for the government to meet social demands without damaging the economic interests of the dominant elites. This impasse would put an end to the populist period in 1964. The polarization brought about by the end of populism affected those in charge of elaborating educational policies. However, as a consequence of political polarization the attempts to change the academic and elitist character of secondary education, continued to be problematic, as this section will show.

The end of the populist period brought about political unrest in the country. On one side were those who wanted reforms to change economic and social structures, including education. On the other side, were the conservative groups which were against populist policies and wanted to change the whole face of development [72]. From 1961 up to 1964 the fight between progressives and conservatives at national level was present within a major number of institutions of the country.
The projects for basic reforms in the social structure put forward by the populist government of President João Goulart, which followed Kubistcheck on office, defied many interests. As the dependency theories suggested, in chapter 1 the dependent character of national economy produced contradictions within Brazilian society. The crisis in populist government, which led to the defeat of the liberal sectors was a consequence of the end of the class alliance which had supported national development up to then [73].

In relation to the educational issues the historical impasse of the populism, and the end of the national development period brought about a strong debate. During this period, the two groups within MEC, which supported the idea of secondary education restructuring, continued to diverge on how to introduce vocational or practical subjects in the curriculum, as a means to improve secondary education. The essential dissimilarity between the solutions put forward by one or another group of policy-makers, was demonstrated by Clarice Nunes:

*These propositions ... were different by virtue of the different concepts of education proposed by those groups: one stood for the sense of maintaining the social order and the other group's beliefs went in the direction of achieving social transformation [74].*

The political and social crisis, of the years just before
1964, stimulated a more critical analysis about education and other social policies. At this time, educational policies introduced in Brazil, as a consequence of economic and cultural dependence, were criticized by progressive educationists who denounced cultural alienation and proposed another kind of education: "education for critical consciousness" [75].

The 1961 new educational Law, LDB (Law of Directives and Bases of National Education) tried to overcome educational underdevelopment and solve social inequalities through a better distribution of enrollments among the different social strata [76]. However, arguments launched against that Law stated that it did not provide democratic access or an adequate preparation for the various social groups to attain a good level of education [77]. Suggestions for secondary education reform were made emphasizing the necessity for schools to try to meet the challenges posed by the Brazilian socio-economic structure: Brazil counted, by then, millions of youngsters without secondary education or prospects of employment [78].

The contradictions of Brazilian education policy-making could be exemplified by the reform attempted by the educationist and MEC's official Lauro de O. Lima [79]. In that author's own interpretation, this project was intended to be not a mere repetition of the past experience with technical secondary schools, but instead a revolutionary change in the aims of education [80].
Lauro O. Lima's proposed reform was rejected. A second alternative was put forward by the Ministry of Education. Elaborated by DEI, the Industrial Education Directorate for secondary lower schools, this new project would not put at risk the social structure, or the private system of secondary schools maintaining a specific type of school for training the children of the lower strata. On the other hand, DEI's policy would satisfy the needs of an emergent industrial elite in need of skilled labour. As the demands of industrialization required effort to provide training for specified occupations, the resources to launch this kind of schooling would come from different sources. North-American assistance helped to introduce work-oriented subjects in the curriculum through a programme for co-operation on industrial education [81].

However carrying these reform proposals through was not an easy task. Causes of difficulty came from the contradictions of policy-making in a coalition based government. The progressive and liberal educationists within the Ministry of Education had not been successful in implementing their policies. The most powerful body of decision-making in that time was the Conselho Federal de Educação (Federal Council Education), which represented conservative interests. Any changes in education were impossible without its approval, as Oliveira Lima later pointed out:

Our reformist illusion was so ambitious by then,
that we had forgotten that the Ministry of Education had totally lost its power, which was transferred to the Federal Council of Education \[82\].

After this analysis of the educational policies attempted during the last part of populist period, the next subsection will review subsequent secondary education reforms, which came about when Brazil embarked into a new model of development in 1964.

2.2.4. The Education Reform of 1971: first achievements and recent developments

This subsection argues that successive attempts to change secondary schools in Brazil were only legally completed when the circumstances - provided by the model of dependent development of the country and the emergence of the military government in 1964 - finally allowed this change. The reform of education then, was a necessity to adapt educational policies to the ultimate aims of a modernizing capitalist country.

The 1971 Law 5692 represents a unique case in the Brazilian education history, being the first time that the traditional academic function of secondary education was transcended. Other functions like the vocational orientation of the pupils and the training for work were not seen as part of the secondary school curriculum until the 1971 Law,
in spite of earlier attempts by reformers.

The changes in education after 1964 were closely linked with the new kind of government installed that year. The military government was the solution found by the elites to solve the populist crisis. Thereafter, a new economic and political style was adopted, with the support of the economic elite and sectors of the urban middle classes [83].

The military took control of Brazilian society, assisted by technocrats and government officers mainly from the urban middle classes. As a result, Brazilian economic and political change brought about changes to education. In 1968 the reform of higher education was undertaken, followed by primary and secondary education in 1971 [84].

It is argued here that the 1961 Education Law and the 1971 reform were basically different from earlier reforms, both in terms of the concepts supporting these policies as well as in the process of their elaboration. It is also argued that the internationalization of Brazilian economy, intensified after 1964, resulted in a new relationship between education and production. Finally, this subsection argues that the reform of education was mainly inspired by economic considerations rather than pedagogical assumptions.

The 1961 reform brought about a decentralized system of education administration, although federal control over curriculum, teacher's qualifications and the various types of school, resulted in a limited initiative and autonomy at
local level. The 1971 reform reinforced federal power which regulated overall educational policy and determined strict rules for all levels of education through the Federal Council of Education [84].

Vocational education was put forward as part of an educational project by the economic elites involved with 1964 coup. The military and the technocrats gave special attention to improving that type of instruction, because in the view of planners and economists, education and human resources would be conducive to a qualitative change in the economic basis of society [85]. Primary and secondary education, as well as the universities, had to improve their performance in ways favourable to economic development, they proclaimed.

Differents plans and policies were proposed to introduce new kinds of education related to productive work, in primary school and secondary schools with diversified curricula. It was noticeable that the reform of education through Law 5692 happened within a political system characterized by strong centralization of powers within a climate of economic euphoria with an economic growth rate of about 11% per year [86].

The military government was seen as the solution to the socio-economic crisis and was supported by different sectors of Brazilian society. As a consequence of successful economic policies, the country enjoyed a period of prosperity known as Milagre Brasileiro (The Brazilian
In the educational field, the government undertook policies which were rather new. There had been plans since the early sixties, proposing job-training as a task for the formal school system. This qualification-for-work in the school was reinforced by human capital theory, then sponsored by the economists and planners from Brazil's Central Planning Office. These policies encapsulated a strong belief in the major role of education in developing society as a whole, promoted by the technocrats [88].

-The adoption of vocational education

The aim of this subsection is to sketch the specific policies on vocational education undertaken during the period of the military government after decades of debates about secondary education which had being emphasising the need to stress, at this level, more practical kinds of studies.

However, the subargument of this subsection is that the introduction of vocational education did not fit the complexities of Brazil's socio-economic process of development. The complexities of the cultural tradition of an educated elite and poor illiterate masses remained unchallenged by the policies put forward by the government [89]. Educational structures were tied to traditional values in spite of the country's economic development.
It is argued that vocational education attempted to fulfil different roles: i) to provide the country with a new kind of work-training, needed for the economic expansion under way; ii) to keep the traditional role of secondary schools for some youngsters, allowing them to go on to higher education; iii) to meet the expectations of internal and external economic dynamics, e.g. favouring the qualification of a modernized working-force at secondary as well as at university levels. In order to test these arguments, this subsection will look at the initiatives taken since 1964 to reform education.

The idea of education related to training for work had been incorporated in the national plan of development since the 1968 Programa Estratégico de Desenvolvimento (Strategic Development Programme). This movement towards vocational education paralleled economic growth in the years 1967 and 1968 [90].

The movement towards this kind of secondary education, (i.e. related to working-training) was helped by the circumstances provided by the model of economic development adopted by the military government. Policies in the country were related to national development plans, under the surveillance of the Ministry of Planning. In addition, new agreements with international agencies, such as USAID would play a substantial role in educational reforms [91].

In 1965 the government created the committee for planning the improvement of the middle level school system: EPEM,
Equipe de Planejamento do Ensino Médio (Planning Group for Middle Level Education). This group was composed of Brazilian and American specialists, and worked under the agreement for co-operation and assistance established between the two governments [92]. The studies undertaken by that group led to the creation of the Ginásio Polivalente (Polyvalent Lower Secondary School) to take the place of the already existing Ginásios Orientados para o Trabalho (Work-oriented Lower Secondary School) [93].

The new vocational curriculum, besides offering general education, included four areas of practical activity: industrial, commercial, agricultural and home economics. EPEM activities, related to school building, equipment and training of personnel to run these schools, have been very influential within the Ministry of Education since this Committee was established [94]. The basic aim of these schools was "to offer simultaneously humanities, science and practical initiation, to constitute a basis for later studies or to allow entry to a professional occupation" [95]. This was the most famous of the vocational education experiments, and it was intended to be a future nation-wide model [96].

Some of the Ginásio Polivalente's principles, e.g. the study of both technical and general knowledge subjects, the adoption of an overall curriculum planning, and the adoption of different syllabuses inside the secondary schools, were later introduced by the reform of education institutionalized
All these measures were taken under the auspices of the Ministry of Planning, one of the most influential forces in the re-orientation of educational policies during that period [97]. The most important feature in the reform introduced by Law 5692, was that there would no longer be a separation between the first cycle of primary and the intermediate level or lower secondary school. Compulsory schooling then was extended automatically from four to eight years. At this level, the Law changed the secondary academic bias, providing students with formative and vocational guidance, as well as initiating them in work skills and experience.

However, it was in the second level (of secondary school) that the major change occurred. The Law, prepared by a working-party, carefully contemplated the question of unifying all the types of secondary school under a common core curriculum with the aim of preparing the pupils for working-life as well as to entry to higher education [98] [99].

When the 1971 educational reform was passed very few schools in the country were in a condition to offer those courses providing a certificate of professional qualification, which entitled the students to a middle-level profession [100]. Because of that, since 1975, a new concept of a basic-training for work was introduced as a new opportunity for graduates at secondary level. The schools
were thereby allowed to offer a number of technical courses or, instead, a second level certificate of general studies.

The guidelines issued by the Federal Council of Education had a recommendation for "the integral education of the adolescent" which was supposed to give a preparation for work-life in a broad sense instead of a "training for a job strictu sensu" [101].

After several criticisms, which pointed out the inconsistencies within the legislation, the education authorities in the Ministry issued new regulations. The controversy was stronger in respect to the compulsory vocationalization and the transformation of traditional academic secondary schools into technical schools. To prevent any opposition, the legislation had already noted the possibility of "the specific training part (of the curriculum) being changed into a thorough study of general subjects" [102].

Therefore, the interpretation of the Educational Reform Law 5692 by the subsequent guidelines issued by the Federal Council of Education changed the earlier characteristics of secondary school as a compulsory work-training place. The unwanted vocational subjects were to be taught under the scope of information to help the student to adapt to a variety of jobs within an occupational field. This distorted the previous model of a diversified curriculum to be taught to all pupils leading them to a career choice.

The task of secondary education after these changes in
the legislation excluded providing qualifications for a specific job. However, it still held the potential to provide some vocational guidance and skills. The later alteration in the Law left two options for students: either finish job-training at school and get a middle level technician certificate, or continue studies in a higher level course after obtaining a basic-training certificate. The qualification as technician was obtainable after the fourth year as in the former technical school model [103].

It is suggested, as an interpretation, that the vocational purposes of Law 5692 were changed due to political and economic circumstances. The internal and external factors which allowed the adoption of such a policy were changing rapidly especially after 1974, which saw the end of the Economic Miracle and the beginning of a more decisive political opposition [104]. Furthermore, external help and advice had been cut off since the beginning of the decade: USAID priorities changed and the flow of international finance diminished as a consequence [105].

Finally, it should be added here that the shift in the initial purposes of the education reformers were strongly influenced by the local educational leaders within the State Councils of Education. These Councils, after 1964 and particularly, after 1971, were made up of private school owners and their representatives. This happened because of the small role of the public sector in the provision of secondary education.
In most of the states, the poorest being no exception, secondary level education was provided mainly by private schools. Even so, their clients expected mostly to go on to higher education. Those who were not able to afford private schools went to state sponsored schools, in general to evening classes, and their probable destination was work in factories, small firms and clerical jobs [106].

Law 5692 did not persist in its proclaimed vocational aim. Finally, another legal measure, issued in October 1982, cancelled the compulsory vocational character of secondary education [107].

Although, up to the present, little research has been completed to verify the real conditions of secondary schools since the reform, they indicate a poor implementation of vocational education [108]. In most of the cases, the specialized part of the curriculum only changed on the surface, by adopting a re-arrangement of the content of traditional subjects [109].

This section of Chapter 2 has analysed the evolution of the educational system in Brazil and the alterations aimed at changing the academic secondary curriculum into a vocational curriculum throughout this period of Brazilian economic development. The analysis of this period was divided into four different phases: i) from the beginning of industrialization and the reorganization of the State; ii)
the expansion of the *import substitution* model of industrialization and consequent urbanization and social structure diversification since the World War II; iii) the consolidation of industrial capitalism and the crisis of the State in the sixties, provoked by economic and social impasses, that put an end to populism and brought about the military rule; iv) the period under the military rule.

This section showed that the evolution of education was related to the changes in the economic and social conditions brought about by industrialization with the populist governments trying to introduce reforms that allowed a greater participation of the masses in the process of economic development. Educational policies were put forward in an attempt to make education keep pace with the economic and social changes in the country. In the first phase, education was still a privilege of an economic elite.

During the phase of diversification and expansion of industrialization, the reform of the secondary academic school began to be proposed by both educationalists and industrialists, and there were some attempts to add pre-vocational subjects to the national curriculum.

During the third phase contextualized in this section, the period of industrial consolidation, the crisis in education mirrored the crisis of the whole system: this happened when Brazilian national development slowed. Educational reform was thought to be part of the solution for that crisis. Thereafter the country started a new kind of development led by successive military governments, which undertook the
restructuring of many Brazilian institutions including education.

Under these new economic and socio-political conditions, it was easier to establish the compulsory vocationalization of the secondary level. However, the vocational education reform established in the seventies, briefly reviewed in this section, deserves a more in-depth discussion. This discussion will be part of chapter 4 and 5, which will offer an interpretation of this kind of educational policy in Brazil and Colombia.

2.3 - Education in Colombia

This section will analyse the basic conditions under which policy of changing the educational system in Colombia occurred during the period between the 1930s to the 1970s. This section will analyse the socio-economic and political context and the corresponding situation of education in the country.

The hallmarks of educational policy-making in Colombia are the presence of hierarchical social stratification, an internal political system in which the state has played a relative weak role, and a strong international influence on internal policies. Throughout the first half of this century the Colombian struggle to modernize included educational change as one of its targets.

However, it will be argued, since the beginning of the process of industrialization, the political leaders were
concerned to make education more adequate to the exigences of economic development. Finally, after the successive visits of international missions, coming to assist in drawing up economic plans, during the 1950s and 1960s, educational innovations were adopted to fit the socio-economic changes the country was undergoing.

It will be argued in this section that the educational reforms proposed by the Colombian government especially in the primary and secondary levels, from the first half of this century, were closely connected with the economic and political evolution of the country in the direction of modernization.

One decisive support to Colombian efforts, to improve education and relate it to development, came from international agencies and international missions, which worked out the guidelines for that country's modernization. Therefore, this section argues that the recent educational reforms, including vocational education, were an attempt to make education fit a new kind of economic development: modern industrial capitalism.

To pursue this line of argument, this section will contain four subsections. After the introduction, section 2.3.1. will cover the period from the beginning of the educational policies in the country, relating the development of educational policy-making to the economic changes experienced by Colombia. This section will cover a long period of time, characterized by a lack of dynamic in the process of educational change, during the first half of this century.
Section 2.3.2 will deal with a crucial period in which many transformations occurred in Colombia, notably in changes which occurred after the movement known as *La Violencia* and the Rojas Pinilla's dictatorship, ending with the coming to power of the *Frente Nacional* (National Front). This period was one of transition which allowed Colombia to step up industrial consolidation in the 1960s.

Section 2.3.3. will look at the main changes and restructuring in educational policy-making after the National Front coalition was in power. The fundamental reforms of this period were proposed by international missions, in accord with the *Punta del Este Charter* recommendations.

Section 2.3.4. will look at the changes in secondary education through introducing vocational education as a means to fit the needs of economic development, via the state's strategies to make education link with employment. This last section of the chapter will analyse the vocational education policies and their results, which will be further explored in chapters 4 and 5.

2.3.1-The development of a national education system

The purpose of this section is to analyse the beginning of the modernization of educational structures in Colombia. This section argues that the increase of educational provision in Colombia must be seen as an effect of the economic development which occurred after the insertion of the country in the international market, since the second decade of this
century.

The insertion of the Colombian economy in the international market through coffee export, was one of the factors which helped to create the infrastructure necessary for the development of industrialization. The process of industrialization, slow at the beginning of this century, and with a greater impetus since 1945, brought about changes in the occupational structure and accelerated social demands with repercussions on educational policies.

As in Brazil, the government's concern for education in Colombia only began after new socio-economic conditions developed in the country. As in Brazil, education in Colombia from the colonial period was a privilege of the elites. [110]. During the Colonial period, the public authorities did not fund schools but only authorized their functioning. The colonial statute *Leyes de Las Indias* although it recommended the foundation of schools for the indigenous people by the landowners, was never implemented. The characteristics of education in Colombia, then called *Nueva Granada*, did not differ much from that of other colonies of South America. Efforts were concentrated on higher education to prepare the ruling elites; primary and secondary schools were under religious control, and the state was not engaged in providing educational facilities.

After the independence, during the nineteenth century, the impact of liberal ideas affected the development of a national system of education. Under the influx of Liberalism two ideas were particularly relevant to the educational
did. In the 1930s, as in Brazil, the Colombian State carried on internal re-organization to pursue the country's modernization. As in Brazil, a new entrepreneurial class proposed reforms and defied the landowners' oligarchy. During this movement they had to rely upon the only power above the landlords: the State.

The Colombian State, since independence, was controlled by two political parties: Liberal and Conservative, which shared power and represented the educated elite and the landowners from the provinces. The third important force in Colombian political life was the Catholic Church, which had been involved in national affairs since colonial times. Even after the establishment of the Colombian State Constitution, in 1886, the role of the Church persisted unchallenged. That meant powerful political influence and the control of education system by religious sectors, which were not due to change until the first quarter of this century [114].

The 1930s in Colombia were decisive years due to the economic and social changes the country underwent. While in Brazil the pro-modernization groups came to power, after 1930, in Colombia the political scene altered with the coming to power of the Liberal Party, which was to stay in power up to 1946. Thus, the internal re-organization of the country was led by a different kind of political regime, from that established by Vargas in Brazil.

The period between 1934-1938 in Colombia was characterized by a reformist movement which was part of the programme called *La Revolución en Marcha* (Revolution under way). The reforms
question: i) "secularization", e.g. to free education from religious influence; ii) the formal insistence on "practical education" [111].

Education development and educational policy-making would only become important after the country started a new kind of economic development. In other words, internal changes in Colombian society were dependent on a shift away from one-product exploitation. From the beginning of this century, commercial agriculture and incipient industrialization introduced capitalist production and the country started modernization. This process of industrialization, influenced a re-thinking of the aims of education. For the first time Colombian leaders realized the need to link educational system with the productive field.

Due to internal changes in the country's social composition, and its insertion in the international capitalist context, Colombia was exposed to an increase in foreign influence, recognised since the early twentieth century [112]. Investments of the United States of America had increasingly penetrated the Colombian economy, since the establishment of the economic enclave known as the United Fruit Company, during the beginning of this century [113]. Later on the penetration of U.S. companies was extended to all kinds of industries in association with Colombian financial groups.

The economic development of Colombia was linked with political and social movements. The periods of prosperity did not affect the political balance but the periods of crisis
were put forward to allow capitalist development in the country, under the administration of a progressive banker: Alfonso López [115].

The Colombian government undertook innovations to encourage economic development. Issues such as social welfare and the guidance of economic development as functions of the State, the formal displacement of the power of the Catholic Church, legislation concerning tax reform, land reform, protection of labour and creation of unions, were taken up and some were implemented at that time [116]. The increase of coffee exportation and the beginning of industrialization created a new composition of the labour force and consequently, social mobility in the class structure of the country [117].

One of the noticeable achievements of this period was a major reform of public education with a national dimension. With national control over the education system, the government changed educational purposes and structures and made them more suitable to the new socio-economic reality. This new view on education by the government was confirmed by the educational budget which was increased four-fold in that period [118].

Access to education was tackled by measures proposing the unification of secondary schools through a common curriculum. This meant both the confessional and the state schools offered the same subjects and a equal number of years of studies to obtain the Bachíllete (general secondary education certificate). However, this important measure to
democratize education was opposed by arguments from the Church, which claimed freedom to teach its own curriculum. The conflict ended with government retreating from its original proposition and a limitation on curriculum control by the State in private schools [119].

Another measure, taken by this same government, allowed the creation of a national inspectorate and the imposition of a national programme for secondary public schools. In addition to these innovations, the government created the first secondary schools sponsored by the State. They were the so-called Colegios Nacionales[120]. In spite of the existence of a more liberal tendency and the efforts to expand secondary education, the system remained accessible only to a few. Secondary education was paid for by the students or sponsored by the State at the departamentos (regional political division).

This period saw the creation of vocational schools in parallel to the academic system, without the same prestige. Vocational education was first introduced as a form of "school for the poor", when the industrialization of the country demanded more prepared workers. Some vocational institutions were created after 1930 to provide technical-industrial and agricultural training at post-primary level [121]. These institutions were meant to be a response to the needs of the country's incipient industrialization. It constituted a low-level arts and crafts apprenticeship and was not meant to provide anything like a "technical cadre". In response to the new economic activities, commercial secondary
schools were also created. Commercial schools were more prestigious than either industrial or agricultural schools but of lower status than the academic Bachillerato [122].

Thus, overall in Colombia, as in Brazil, education only changed and expanded with the coming of a more dynamic society both in terms of the economy and in social demands. Most of the time, until the reforms of the Liberal Party during the thirties, education, and specifically secondary education, was restricted to a few. Vocational education emerged as a second class type of schooling only to prepare poorer pupils for work in the newly established industries.

2.3.2. The beginning of industrial and vocational education: from the liberal period until the National Front

The purpose of this section is to analyse the interrelationship between the diversification of Colombian economy, changes in social structure and the development of vocational education during the 1940s and 1950s.

This subsection argues that the economic and social changes that occurred in Colombia after the thirties, resulted in attempts to change education in two ways: to meet new social demands and to fit the needs of the economic diversification of the country.

Progress in the economy allowed the liberals to attempt reforms. When the complexities of Colombian society exploded
in a prolonged social upheaval, in the rural areas and in the cities, education was seen as a social remedy. The result was more resources for educational programmes. Within this, the Ministry of Education tried to establish an industrial education network in Colombia [123].

As has already been argued, the progress of vocational education (under the various forms it can take) was dependent of the structure of production of the country. With a great part of the Colombian economy relying on agriculture and coffee export, industry developed slowly. Although progressive movements emerged after the first phase of industrialization, favouring a more practical educational system, these attempts respond neither to the necessities of the economy nor to the demands for more schools.

The first attempt to create a technical school in each departamento, during the period of the Liberal party in power, did not succeed. The state maintained then only one school (in Bogota), from 1936. However, in the departamentos the schools of crafts and apprenticeship flourished, and the number of enrollments more than doubled, by the end of the decade [124]. In some urban centres, like Medellin, the provincial government created an industrial school, where the students were sponsored by official grants. These schools suffered from a lack of well-trained teachers, but survived thanks to the dedication of self-taught instructors, offering practical skills, while the qualified teachers were in charge of the general subjects [125].

Commercial training was provided through multiple schools
without any standardization. They offered two kinds of courses: the elementary level and the higher level. The higher consisted in a six-year terminal course equivalent to Bachirellato. Aline Helg noted the important role of those commercial schools in spite of their lack of standardization. It was their objective to prepare girls more often than boys to enter middle-level jobs in business and communications. Agricultural training through the school system was very limited, in spite of some attempts, during the liberal-leftist government of Alejandro Lopez, to improve it [126].

Throughout the period here under examination, external influences were notable in Colombian political and economic life [127]. International missions visited the country and provided a theoretical framework to interpret national reality; as a consequence external financial and technical assistance was made available to help the government achieve internal goals [128]. Education was one of the fields open to external assistance.

Internally, the country was ravaged from 1946 to 1957 by widespread violence which devastated large rural areas and accelerated migration. The two-party rule ended with the coming to power of Rojas Pinilla's dictatorship in 1953. The new government was characterized as being the government of a "modernizing elite", which held a virtual monopoly of power and resources to attempt to advance the modernization of Colombia. Rojas, while trying to meet the most pressing social demands, avoided any fundamental structural reform that might hurt the interest of the economic elite [129].
When one compare the path taken by Colombian development in this period, with the Brazilian struggle for national development, there were marked differences. While Brazil was trying a nationalist approach to development, Colombia opted for an internationalist strategy to achieve a similar objective. Both kinds of developmental policies acted upon the education system, specially in Colombia. However, in the first phase of the Pinilla's government, education was not a priority. Only after the consolidation of Colombian industrialization did the government emphasise the programmes developed earlier by the international missions.

Two things characterized educational policies during this period in Colombia: i) the expansion of the enrollments at secondary level and ii) the influence of international missions, through planning policies. Social demands, of a accelerating population growth and migration to cities, put enormous pressures upon the expansion of educational facilities. Data offered by Andre Benoit indicate expansion in secondary education with a remarkable increase from 1945 to 1957 [130]. Enrollments tripled in that period, although much more within the private than in the public system.

Another characteristic of secondary education expansion was the different evolution of each type of course at this level. As a consequence of population growth and economic diversification, a greater number of pupils looked to secondary schools as a means to enable them to find a job. Although the schools in most demand were those that provided
academic course, other types of secondary schools were sought by increasing number of youngsters. Teacher-training colleges and the technical branches especially in commerce and industry also expanded their number of enrollments [131].

The most remarkable initiative taken by the Rojas Pinilla's administration was the process of reforming the educational system in 1956. This process began with the elaboration of the First Five Year Plan of Education, under the surveillance of Gabriel Betancur-Mejia, Minister of Education [132].

During this period of the country's internal re-organization, the commitment of the Colombian administration to planning was an indication of efforts to bring the country into a new era of economic and social development. However, the First Five Year Plan although highly praised internationally, would be abandoned by the successors of Rojas Pinilla. Despite of the abandonment of the Plan, even before its publication, some measures had already been in motion before the coalition known as Frente Nacional (National Front) came into power. The programmes to continue that policy reassessed secondary reforms with the aim of providing more practical and vocational skills for the pupils. For this purpose, pilot schools were created to test the new curriculum [133].

Thus the brief modernizing dictatorship of Rojas Pinilla, in Colombia, was attempting to establish the basis for a future technocratic branch within the State. From that time the influence of technocrats like Betancur-Mejia was
noticeable; he was a colaborator with Pinilla's regime and a very influential personality on educational and planning policies, during the National Front period. An international figure and a moderniser, Betancur-Mejía would become one of the most important agents of the idea of "education for economic development" [134].

In the beginning of the 1950s, the consequences of social upheaval known as La Violencia (The violence) demonstrated that there was irreconciliable differences within the Colombian social structure. The exclusion of the lower classes from economic and social benefits of economic development produced instability in Colombian society. This was visible in the constant violent mass movements both in rural and urban areas. As a consequence of the civilian unrest, Colombian politicians recreated the dual-party system in a kind of compromise between civil rebels and Armed Forces [135]. This was a transitional period containing elements which influenced educational changes later on. These elements were related to the economic and social characteristics of the country: the consolidation of industrialization, population growth and migration to the urban centres. Colombia also underwent a certain amount of prosperity and capital accumulation, as well as an increase in unemployment and underemployment due to the migration to cities [136].

Though the social situation was again threatening, few reforms were attempted: they were opposed by the still strong conservative values, within a portion of the Colombian
elite. In the educational field the structures remained basically unchanged, e.g. there were two parallel systems, with different prestige, leading different social strata to different positions within the occupational structure. Another attempt to establish a common cycle for the secondary schools met strong opposition from the Catholic Church [137] as the new curriculum abolished the old humanities syllabuses and replaced Church control.

Overall, this subsection has analysed the main characteristics of educational change in Colombia in the first half of this century, in relation to economic and social evolution. These characteristics such as the explosion of the enrollment numbers during the 1950s and privatization as the main characteristic of the secondary school system were paralleled by changes in Colombian society such as urbanization, demographic expansion, increase in exports and the violence by urban and rural masses. However, the internal changes also encouraged a new kind of educational system, more in accordance with the needs of a modernized society in pursuit of economic development. The answer for these problems faced by Colombia came through a number of international reports: after that, a few modifications were introduced into the traditional curricula of primary and secondary schools. Vocational education and academic secondary schools remained apart.
2.3.3. Expansion and innovation: secondary education in the sixties

This subsection will analyse the changes introduced in the educational system at the secondary level from the sixties until the creation of the INEMs in 1969, as a new concept of secondary education.

It will be argued that there was a unifying factor in this series of secondary school innovations: all of these policies were influenced by ideas from outside of the country, as a result of the Colombian economic elite's effort to match international standards of development. (This argument will also be tested in the next chapter, which will discuss in greater detail the policies introduced in Colombia, with the assistance of international agencies).

It is suggested that the improvement of Colombian education during the second phase of the National Front coalition was due to the international links cultivated by the technocrats in charge of the country's development planning. (Foreign assistance to educational policies came to Colombia via finance and technical advice.) The Colombian international links had special relevance, since the government entrusted international committees with enough authority to produce plans and policies in line with development goals.

Aline Helg has pointed out the way in which foreign models and pedagogic ideas came into the Colombian education system:
After 1950, paralleling the leading movement towards economic development with investments in human resources, the Colombian multiplied their links with the international organizations and external advisors (such as UNESCO, IBD, FAO, Mission "Economics and Humanism", etc.), the Ministry of Education, unstable and with a low credibility in the country, asked for their participation in the mid-term planning of the national system of education. The excuse was that these organizations would act more independently than the political partisans, but the real reason was that their collaboration would allow Colombia to benefit from external aid [138].

This close relationship with international sources of finance and ideas was not a privilege exclusive to Colombians. However, it is being argued, they were eager to adopt the models of planning that were spread by international agencies and inter-regional organizations over Latin American countries.

Colombia was the first Latin American country to adopt a ten-year plan for social and economic development, following the recommendations of the Punta del Este Conference in 1961. These policies, suggested by external advisors on economic, social and educational development, were considered by the international reports, as being necessary to improve the country's "backwardness" [139].

In accordance with the theories of development sponsored
then by the international organizations, the combination of economic and technical assistance, training of human resources and education would work together to treat the problems of occupational marginality in Latin America: to test these theories international planners chose Colombia [140]. That country became a laboratory for an experiment in economic development with the assistance of foreign organizations. From then onwards national policies related to the reform of social and economic structures were controlled by the technocrats with external assistance [140].

This technocratic approach to education, it is argued, influenced change in educational values. The educational system of Colombia was affected in many aspects by the new ideas introduced by modernizing elites. One example is the former prominence of the Catholic Church being replaced by state control of secondary and high education. Since the previous decade the main character of education had been changing albeit slowly. Colombian education had experienced three forms of subordination: to the Catholic Church, to the State, and lately, to "the principles of economic development" [141].

Intervention from the State favouring economic development had been seen as a desirable thing in economic plans since 1962. The issues arising from planning policies became an important topic in Colombia. In this period, some local groups came to play an influential role in economic and social policies. These internal influences came mainly from
the National Federation of Merchants, FENALCO and from the National Association of Manufacturers, ANDI [142].

Overall, this subsection has analysed the ways in which educational change in Colombia, specifically at secondary level, were influenced by a modernizing elite, during a period of change in the economy, as well as in politics. However, the series of attempts to implement educational reforms were restrained by the conservative forces still very influential in Colombia. Only by the end of the National Front period, when Colombia experienced a new influx of economic development were these policies more effective.

The years which preceded the final reforms of educational structure had, however, the function of preparing future changes through studies and recommendations made with the help of the international agencies.

2.3.3.1 The creation of INEMS

The purpose of this subsection is to particularize the most important experiment which was established in the educational field in the last two decades. It is argued that the creation of the Institutos de Enseñanza Média Diversificada represented the final effort to provide secondary education of a good quality and to change the character of a traditionally academic biased curriculum. Furthermore, the INEM was a product of international expertise and financial assistance to Colombia's educational policies. This "laboratory school", implemented by
educational planners in Colombia, was an answer to the alleged need for intermediate skilled manpower both in industrial and agricultural sectors [143].

The INEM schools were followed by the ITA's Institutos Técnicos Agrícolas, institutions for rural technical secondary education. The aim was to provide a curriculum for a genuine multipurpose education and for a corresponding vocational guidance of the pupils [144].

The path pursued to achieve the INEM model was taken, step by step, over eight years. There was a combination of factors which led to this careful preparation of what should become a pilot to secondary school reform in Colombia. In 1962, the Minister of Education requested UNESCO, USAID and IBRD to appoint a mission of experts to assist the Colombian Ministry of Education, which was to be restructured this same year [145]. After an interim report in 1963, it was decided to appoint another mission with extended functions and duration "to help the Ministry Planning Office develop an educational plan for Colombia". The report produced by the mission's leader, Glenn Varner, suggested major changes to restructure secondary education in the direction of a comprehensive curriculum. The ideas of this report, which emphasized the need to make education compatible with the world of work, gave rise to another project, founded and elaborated by international experts from UNESCO, USAID and IBRD. In accordance with the project guidelines, education should be closer to the needs of the economic sector and should help to prepare middle level personnel [146].
Following this recommendation the Ministry of Education presented a project to the World Bank in October 1967 and by July 1968 a loan was approved. The first ten Institutos de Enseñanza Média Diversificada, known thereafter as INEM when they were established in 1969, created a new kind of curriculum. They offered both academic and diversified programmes under one unified administration.

The first INEM opened in 1970 in the more industrialized and urbanized regions of the country; cities such as Bogota, Medellin, Barranquilla. Half of the cost of the project was financially supported by the World Bank, and other half by the Colombian government. Assistance in training personnel was provided by the United States Agency for International Development, USAID. Many ideas for the 1978 reform of secondary national curriculum were derived from INEM's experience [147]. Reports about the programme from the time it was being set up suggested that a good performance was in prospect in view of the excellent facilities provided and the high standard of the especially-trained teachers at the INEMs [148].

The main innovation these schools brought was a vocational curriculum and a new administrative organization. The basic philosophy which inspired the creation of INEMs had a double purpose: first, to establish a very efficient educational system at a lower cost, because of being based on economies of scale for the utilization of facilities and equipment; second, to democratize secondary education, by allowing the
pupils to choose either a vocational or academic trajectory towards the completion of the course [149].

Another expectation, attached to the creation of INEMs, was that the Institutes would attract children from lower social strata, whose preference, presumably, for a vocational career meant an immediate engagement in the world of work. Significantly, the INEMs were built in the peripheral areas of the cities, trying to be closer to their potential students.

Within INEM, the academic and pre-vocational subjects were given the same importance. The main objective was to give the pupils an opportunity of choosing the type of vocational training most suited to their interests. With this purpose the INEM was prepared to provide a balanced programme including general studies, pre-vocational subjects, and specific vocational training [150].

Despite all the special conditions surrounding the INEM project and the creation of a series of privileged facilities, from specially designed buildings to INEM's teachers and personnel specially trained, not all of the previous aims were put into practice. Some problems occurred between the original project elaboration and its actual implementation.

Under the INEM scheme, pupils should go through three different stages, during the 6 year course. In the first stage vocational guidance was provided through the pre-vocational subjects and activities; the second stage offered, during two years, one or more vocational tracks to the
pupils; in the third and final stage, the school offered a vocational specialization in one of these following fields: industry, commerce, agriculture, social services, and academic subjects.

To put all these options in practice and to combine the interests of the pupils with the possibilities of the school was one of the major problems related to the flexibility of the programme. The essential feature of the original design, which was put into operation, was the plurivocational curricula, the departamental academic administration of the schools and the structural link between teaching and curriculum planning [151].

INEM is one example of an educational policy proposed with the technocratic approach used in problem-solving, which was also adopted for rural primary and higher education programmes. Furthermore, the INEM represented the culmination of various attempts to change the educational system and to adjust it to a modern industrialized society facing serious problems of unemployment and underemployment [152].

In the Colombian case, as in the Brazilian one, vocational education became an instrument to support economic development and to solve the contradictions caused by this same development. This aspect, however, was more visible in the Colombian project [153]. This kind of experiment was expected to provide not only skills for the job market, but also to expand Colombian occupational structure. The next section will discuss the new reforms which took place after the INEM experience.
2.3.4. The recent reforms of secondary education: 1974-1978

This last part of section 2.3 will look at the main tendencies observed in the recent reforms in secondary education in Colombia.

It will be argued that various reforms of secondary education during the 1970s reaffirmed the attempts to provide a vocational and pre-vocational character at that level. Therefore, the cycle of vocational education reforms did not end with the INEMs, but advanced towards the change of the whole structure of secondary education.

In spite of this effort, as has been demonstrated by recent studies and surveys on Colombian secondary education [153], the academic courses remain the most prestigious type of education. Neither of the aims, to bring education closer to the economy and to democratize access to education, have been achieved up to now.

It is suggested that the reforms of educational structures, which were put forward, could not match the complexities of the economic and social conditions in a dependent society. This section will look at some of the contradictions which permeated Colombian society and economy, and prevented educational reforms from being effective during the 1970s.

Between the years 1958 and 1968, the national outlook in Colombia changed quickly. The main feature in the economy was the end of the process of import substitution, which was replaced by the export industry. This also influenced a change
in rural structures, with a growing commercial agriculture and a massive migration of unemployed people. An acceleration of unemployment resulted; this has been the major characteristic of Colombian late economic development.

This malfunction drew a lot of attention, from the government and also from international organizations, resulting in the ILO's Report on the occupational situation in Colombia, issued in 1970 [154]. This situation was not specific to Colombia. However, the perplexity and search for solutions, by both local government and its international advisors, was a sign that the model of development was in peril. Education and occupational structure were carefully scrutinized; the solutions proposed again pointed out the use of vocational education or to more training at school for the youngsters.

Two major tendencies observed during that period emphasized the need for an expansion of the educational system and the importance of practical education. New educational policies were drawn to match the new socio-economic situation in the urban centres and in the rural areas. Since the beginning of the 1970s, the National Development Plan called for a whole restructuring of the educational system with the aim "to match the basic education and the vocational training to the real needs of production" [155].

The INEMs provided the model for the new reform in secondary education: the main idea was offering an integrated middle school in a unique diversified programme from the basic cycle to the 10th or 11th year, similar to what was
established in Brasil through Law 5692. The Decree 080 of 1974 proposed a final structuring of the secondary education system [156].

The explicit purpose of Decree 080/1974 was to extend the INEM experiment to all grades of post-primary education, which was the same idea behind vocationalization in Brazilian schools, first introduced by the PREMEM's schools.

In 1976, Decree 088 introduced a new concept to reinforce the previous ideas of a preparation for work. This new legislation was known as educación intermedia profesional and was meant to offer a new certificate of secondary education in preparing for technical and assistant technical occupations [157]. This same Decree intended to establish a whole restructuring of the Ministry of Education and, consequently, of the whole educational system, defining four levels for formal education: pre-school, basic (including primary and secondary), middle vocational and middle professional. This re-organization completed the vocationalization of secondary level, which then became compulsory and could be extended to further training for a profession [158].

It is noticeable that at the same time as the Colombian educational system was being changed, proposing a vocational curriculum to be applied to all pupils, in Brazil there were many pressures to extinguish the compulsory secondary vocational education.

All the policies attempted by Colombia were in connection with economic development plans and reports issued by international missions since the fifties. In one way or
another, they expressed the orientation of successive governments, under different political regimes, towards a model of development based in industrialization. However, economic development resulted in a deep uprooting of the Colombian labour force, with subsequent unemployment and underemployment.

The idea which explains such restructuring was the lack of compatible links between economic growth and capitalist development on one side, and social policies attempted by the Colombian government, on the other. Moreover, the dependent development did not allow the generation of a productive system able to create a fresh and strong employment demand.

By the end of the 1970s, the traditional characteristics of secondary level of education in Colombia were unchanged, despite the attempts made to alter it. The country suffered from a reduced number of enrollments, when compared with other Latin American countries; the private schools still prevailed, located in urban centres, providing access to higher education; there was a strong diversity between forms of organizing the curricula, and the distribution of the pupils through different types of school was uneven [159].

After many reforms of the educational system in Colombia, an analyst observed:
The "bachiller Academico o Clasico" (the academic or classical secondary education certificate) remained virtually unchanged throughout the reforms. In general, most of the changes in the educational system have involved increases in the number and types of specialization offered, and making them available to a broader spectrum of the population [160].

Overall, the purpose of this chapter has been to emphasize the relationship between education and development in Brazil and Colombia. The chapter has argued that educational policies and reforms set up by the governments of both countries have been related to dependent development which characterizes these societies in the recent historical period.

This chapter first contextualized the provision and the expansion and modification of the educational system in both Brazil and Colombia. Secondly, this chapter sought to contextualize educational reforms, in terms of the relationship between dependent development and the establishment of social policies. This relationship is considered here as being a crucial point in the interpretation of the late reforms which introduced secondary vocational education in both countries.

In both countries, it was observed that education policies have changed when the countries were attempting to achieve economic and social changes. Both Colombia and
Brazil were seeking to restructuring their educational systems to make them match an industrial-based economy. An attempt to change the main characteristic of secondary education and to link it to the productive system, was observed in both societies, after the beginning of industrial expansion. In this particular aspect, Brazil and Colombia were both assisted by international agencies and missions through reports, recommendations and development of projects for reforming education.

Nevertheless, the innovations in education were carefully controlled by the ruling elites and strategies such as the change of secondary education into a more democratic kind of schooling did not succeed in both countries.

But there were also some differences between the two countries. There was evidence that the Colombian government applied for external assistance to solve many of its internal problems created by the modernization of the country, before the advent of "foreign aid" programmes. After the Liberal period, through the dictatorship of Rojas Pinilla, and, specifically, during the period of the National Front, Colombia chose international assistance for its economic development. This option led the Colombian politicians to entrust educational planning, among other policies, to foreign advisors.
In contrast, in Brazil, the character of development was nationalist, and during the fifties, and beginning of the sixties, nationalist and reformist policies sought local alternatives to development, supported by populist governments. Education was viewed then as one of the most expected of the reformas de base (basic reforms) which sought socio-economic restructuring of the the country.

The end of the populist government brought about a new kind of development: the so-called "associated model" which went more in the same direction that Colombia was going: looking for foreign advice and assistance to help economic development. Thereafter educational policies were established following international advice and became more adjusted to the demands of economy.

Finally, the internal conditions which marked the process of development in Brazil and Colombia, also marked the similarities and differences between the vocational education policies adopted by the two countries. These similarities and differences will be further explored in chapters 4 and 5. The similar pattern of external influences both countries experienced will be discussed further in the next chapter.

NOTES AND REFERENCES

1. The concept of "associated development" was created by Fernando Henrique Cardoso to term the model of development


8. See Octávio Ianni, Crisis in Brazil, (Translated by Phillis B. Eveleth), New York: Columbia University Press, 1970 for an analysis on populist politics in Brazil.

9. See a description of the infrastructure improvements in Brazil to allow industrialization progress in Evans, op. cit. p 83-93.

10. The main assumptions of modernization applied to education were systematized in the studies of Frederick Harbison. See Frederick Harbison and Charles A. Myers Manpower and
which involves the alliance between local and international capital, after the dependent countries started a new phase in their internal industrialization. For a discussion of this concept and how it applies to Brazil see Peter Evans, *Dependent Development*, Princeton, New Jersey: Princeton University Press, 1979, p. 31-34.

2. The alliance between internal elites and external capital had economic and cultural repercussions. Peter Evans quoting Osvaldo Sunkel, stated: "Contemporary elites do not send their shirts to Europe to be laundered as the traditional colonial rulers of Latin America supposedly did, but they are part of what Sunkel calls 'the transnational kernel' that is, 'a complex of activities, social groups and regions in different countries... which are closely linked transnationally through many concrete interests as well as by similar styles, ways and levels of living and cultural affinities'." See Evans, op. cit. p.30. The links of the Latin American educational elites were described by an analyst of educational planning: see Alberto Moncada, *La crisis de la Planificación Educativa en América Latina*, Madrid: Tecnos, 1982, p. 30-31. An analysis in more detail of the interconnections of Latin American educational elites and international apparatuses, is available in the study of Adriana Puiggros, *Imperialismo y educación en América Latina*, Sacramento, México: Editorial Nueva Imagen, 1980, p. 215-219.


4. A report on the specific situation of aid and co-operation in Latin America in relation to the development policies was
Education, New York: Mc Graw-Hill, 1965. See also, F. Harbison "Strategies for investing in people" in J. W. Hanson and Cole Brembeck, Education and the Development of Nations, New York: Holt, Rinehart and Winston, 1966, p. 149-159. This author state that "there is a strong correlation between a country's educational development and its economic productivity. Using an indication of educational development that is based on the enrollment in secondary schools and universities, we found that in the 75 countries the co-efficient of correlation between educational level and the gross national product per capita is 0.88. The best single indicator of a country's wealth in human resources is the proportion of young people enrolled in secondary schools." For a critical appraisal of modernization theory of development, see P.W. Preston "The positivist high tide: modernization theory" In Theories of Development, London: Routledge and Kegan Paul, 1982, p 83.

12. Ibid. p.33.
15. See Moncada, op. cit. p.94.
16. Ibid., pp. 93-94.
17. Ibid., op cit., pp.42-43.
18. Ibid., p. 42.
19. The term "late capital accumulation" indicates the country had known a phase in its economy which was characterized by the shift from accumulation of capital surplus from goods exportation to a new form of economic exploitation, through the development of industry.

20. See Gimeno, op. cit. p. 31.

21. Ibid. p. 31-32.

22. See Otaiza de Oliveira Romanelli, História da Educação no Brazil, [History of Education in Brazil], Petrópolis: Editora Vozes, 1978, pp. 58-110. This work is a comprehensive analytical study, which discuss the evolution and changes in Brazilian educational system, as a product of socio-economic factors related to the industrialization of the country.

23. See O. de O. Romanelli, op. cit. p. 79.

24. Ibid., p. 49.

25. Ibid., p. 65.


28. Ibid., p. 108.
31. Ibid., p. 142.
32. Ibid., p. 142.
33. Ibid., pp. 154-155.
34. Ibid., p. 159.
35. Ibid., p. 153.
37. See Romanelli, op. cit. p. 127.
39. See a discussion of the State's role in the diversification of Brazilian economy in Peter Evans, op. cit., p. 85.
40. The effects of Vargas' dictatorship on educational change are sketched by O. Romanelli, op. cit., p. 128.
41. Ibid., p. 128.
42. Marinete dos Santos Silva, A Educação Brasileira no Estado Novo [The Brazilian Education during the Estado Novo], São Paulo: Ed. Livramento, 1980 provides a detailed account of the educational policies during this period.
44. Two major schemes for training the skilled work-force were created then. One was SENAI, Serviço Nacional de Aprendizagem
Industrial (National Service of Industrial Apprenticeship), in 1942 to serve the demand of the secondary sector, and SENAC, Serviço Nacional de Aprendizagem Comercial (National Service of Commercial Apprenticeship) to prepare for the tertiary sector, in 1945. See Romanelli, op. cit., p. 166.

45. Romanelli indicated the evolution of the enrollments in the technical and secondary academic schools from 1935 until 1970. The gap between these two sectors increased steadily as the expansion of enrollments progressed. O. Romanelli, op. cit., p. 113.

46. Ibid., p. 113. See also Clarice Nunes, Escola e Dependência, o ensino secundário e a manutenção da ordem [School and Dependency, the secondary education and the maintenance of order], Rio de Janeiro: Achiame, 1980, p. 30-31.

47. During this period the educational system was characterized by a dual-system: the secondary academic education was to prepare for "individual leadership" whereas the professional branch was addressed to the "less privileged classes", in the words of the legislator. See Romanelli, op. cit. pp. 154-156, 168-169.

48. Octávio Ianni, O colapso do populismo no Brasil [The collapse of the populism in Brazil], Rio de Janeiro: Civilização Brasileira, 1975. This study provides an in-depth analysis of Brazil's economy, society and politics during the late phase of the period known as populism.
49. Peter Evans remarked that "the ascendance of 'desenvolvimentismo' as an ideology in the late fifties increased the state's general involvement in economy", P. Evans, op. cit., p. 93.

50. See Ianni, op. cit., pp. 100-131. For the coverage on economy see P. Evans, op. cit., p. 89-93.

51. Ibid., p. 94.

52. Clarice Nunes, op. cit. p 34.

53. Ibid. p. 44. Romanelli indicated that over the period between 1940-1970, there was a notable change in the occupational structure, with the increase of the more dynamic sectors, and consequently an increasing demand for more specialized education. Romanelli, op. cit., pp. 70, 79, 112.

54. Romanelli stated that "the new phase of industrial expansion demanded new measures for the preparation of the work-force". The answer came through the establishment of emergence training schemes sponsored by private sector. This was the origin of institutions like SENAI, Serviço Nacional de Aprendizagem Industrial (National Service of Industrial Apprenticeship)". Romanelli, op. cit., p.166.

55. Ibid., pp. 179-181.


57. C. Nunes, op. cit. p. 45.
59. Ibid., p. 66.
60. C. Nunes, op. cit. pp 54-55.
61. Ibid., p. 55.
62. Ibid., pp. 52-55.
63. Ibid., pp. 55-63.
64. Ibid., p. 63; Faust, op. cit. pp. 55-69.
65. O. Romanelli demonstrated the gap between the expansion of enrollments in secondary academic and secondary professional schools. Between 1940 and 1950 the secondary academic numbers increased almost threefold, whereas the professional middle schools increased in 70%. See O. Romanelli, op. cit., p. 113.
67. Ibid., pp. 92-93.
68. Ibid., p. 94.
69. Ibid., p. 95.
70. Ibid., pp 102-112.
71. Ibid., p. 40.
72. For an analysis of the political implications of the
decline of populism in the educational debate see Clarice Nunes, op. cit., pp.78-83.

73. Ibid., pp. 88-91.

74. Ibid., pp.83.

75. Paulo Freire advocated a new kind of school which could bring both instrumental and general 'meaningful' knowledge to the youngsters to insert them all into the developmental process. See Nunes, op. cit., p. 93.

76. Romanelli demonstrated how the enrollments in secondary level increased heavily in the private sector, and slowly in the public sector. See Romanelli, op. cit., p.178. Nunes discussing school expansion in the years before 1960 shows that a small proportion of school age group went to secondary education, (14 in 100), and of this group only 20% concluded the studies at this level. Nunes, op. cit. p. 49-51.


78. L. O. Lima, quoted from C. Nunes, op. cit., p.94.


80. Ibid. p. 100. Oliveira Lima advocated the unification of the apprenticeship system, which was exclusive of SENAI and SENAC schools, through the changing of all secondary schools into vocational.

82. Ibid. p. 199.
86. Peter Evans, op. cit. p.167.
87. Ibid., p. 167.
88. M.I. S. de Souza, p. 71. The works of Schultz and Harbison and Myers about education and income growth have been frequently quoted by economists and educational planners in Brazil. 89. Ibid., p. 150.
90. Ibid. p. 127.
91. Romanelli, p. 198-204.
92. Nunes, op. cit., p.149.
93. Ibid. p.148.
94. Ibid., p. 164/-165.
95. Ibid., p. 153.
96. Ibid., p. 148.
97. Ibid., p. 162.
99. Ibid.
104. However, the reaction against educational policies was mostly emotional, against the vocationalization, and few alternatives were offered by educationists. The consequences
on government educational policies, have been analysed in Luis
Antonio Cunha, op. cit.; Mirian Jorge Warde *Educação e
Estrutura Social: a profissionalização em questão* [Education
and Social Structure: the vocational education in question]
São Paulo: Cortez e Moraes, 1977, among others. See also
Romanelli, op. cit. p. 193 and 216.

105. United States of America Department of State, U.S.
*Foreign Aid to Education: Does Brazil need It?,* Washington
document questions the educational aid which had been provided
and reaffirmed the idea that Brazil was becoming self-
sufficient in economic terms, compared to other Third World
countries.

106. Maria Laura Franco "O ensino de Segundo Grau:
Democratização? Profissionalização? Ou nem uma coisa nem
outra?" [Second Level Education: Democratization?
Professionalization? Or none of them?], *in Cadernos de
Pesquisa* n. 47, São Paulo: Fundação Carlos Chagas, 1983; See
also M. L. P. Franco and M. I. Durigan "Os alunos dos cursos
profissionalizantes a nível de segundo grau: um retrato sem
retoques" [The students of the second level vocational
courses: a plain picture], *in Cadernos de Pesquisa* n. 48, São


108. A major study of the effects of educational policies on
Brazilian society after Law 5692 was offered by Gaudêncio
Frigotto *A Produtividade de Escola Improdutiva: um re-exame*
das relações entre educação e estrutura econômico-social
capitalista [The productivity of the unproductive school: a
revision of the relationship between education and capitalist
socio-economic structures] São Paulo: Cortez Editora/Autores
Associados, 1986. An overview of the future developments on
secondary education was provided by one of the members of the
working party on vocational education, professor Valnir
Chagas, O ensino de Primeiro e Segundo Graus, antes, agora, e
depois ? [Primary and Secondary Education: past, present, and

109. This conclusion has been gathered by the research in the
secondary schools of the Estado de Minas Gerais. See, A. Z. de
C. Luscher and Leila A. Mafra "O Ensino de Segundo Grau em
Minas Gerais: Expansão e Desenvolvimento (1971-1984)"
[Secondary Education in Minas Gerais: Expansion and
Development], in Revista Brasileira de Estudos Pedagógicos,

110. Stephen Clissold, op. cit., (see note 9).

111. For a brief account of the major characteristics of
Colombian educational system from the Colonial period
stressing the recent developments see H. Gomez-Buendía and R.
Losada-Lora, Organización y Conflict o: la educación primaria
oficial en Colombia [Organization and Conflict: official
primary education in Colombia], Ottawa: CIID, IDRC, 1984,
pp. 34-45.

112. See Konrad Matter Inversiones Extranjeras en la Economía
Colombiana [Foreign Investments in the Colombian Economy],


114. Ibid., p. 204.

115. See Aline Helg, op. cit., p 194.

116. Ibid., p. 126.

117. See Díaz, op. cit., p. 215.

118. See A. Helg, op. cit. pp. 146-147.

119. Ibid., p 165.

120. Ibid., p 152.

121. Ibid., p 165.

122. In spite of the apparent failure (in terms of numbers), of the Lopez educational innovation, the years between 1934-37 brought major changes into the public system of education. A. Helg, op.cit., p 167.

123. Ibid., p 165.

124. Ibid. p. 175.

125. Ibid., p. 175.

126. Ibid., p. 178.

127. Ibid., p. 201.

128. The Colombian borrowing of services from outside to improve its educational system is a common characteristic

129. The process of educational change in Colombia from 1956 to 1965 was reviewed in Andre Benoit, *Changing the Educational System- a Colombian Case-Study*, Munchen, Veltforum Verlag, 1974, pp. 93-195.. This author provided a comprehensive analysis of educational reforms during Rojas Pinilla's government in pp. 197-203.

130. Ibid., p.169.
132. Ibid., pp. 100-101
133. Ibid., p. 205.

135. See Aline Helg, op. cit. p. 102.
136. See André Benoit, op. cit., pp.205-210, for an evaluation of the effects of economic growth in Colombian education.
137. See note 114 above.
139. Ibid. p 195.
140. Such ideas were stated in the United Nations' report on educational policies *Education, Human Resources and Development*

142. There were many similarities between Brazilian and Colombian industrial lobbies' role in the creation of SENAI in Brazil and SENA in Colombia. Both training schemes were created to meet the need of skilled workers for industry. Brazilian expertise contributing for the development of SENA in Colombia is confirmed in Cláudio Moura Castro, "Academic Education versus Technical Education, which is more general?", in T. Labelle (ed.), Educational Alternatives in Latin America, Los Angeles: UCLA, University of California Press, 1975; and Jayme Abreu, "Craft and industrial training in Brazil- a socio-historical study", in J. Lauwerys and D. Scanlon (eds.), Education within Industry, London: Evans Brothers Limited, 1968, p.210-225.


144. Ibid. p.16.

145. See C. F. de Machado, Estudio de cambios e innovaciones en la educación técnica y la formación profesional en América Latina y el Caribe [Study on the changes and innovations in technical education and professional training in Latin America and Caribbean]. Colombia, Santiago de Chile: Oficina Regional de Educación de la Unesco para América Latina y el Caribe, 1979, pp.16-56. 146. Ibid., pp.16-17.

147. Ibid., p.8.
148. See Wellington, op. cit. p. 16.
150. Ibid., p. 17.
151. Ibid., p. 18.
152. Ibid., p. 27.
155. See C.F. de Machado, op. cit. p. 4-5.
154. Ibid., p. 7-8.
155. Ibid. p. 8.
156. Ibid., p. 8-9.
157. Ibid. p. 21-22.
158. Ibid. p. 22.
160. G. Psacharopolous, op. cit. p. 60.
CHAPTER 3

FOREIGN INFLUENCES ON EDUCATIONAL POLICIES IN BRAZIL AND COLOMBIA

The purpose of this chapter is to discuss the attempts at educational innovations by a number of foreign organizations involved in technical and financial assistance to the Latin American countries during the last three decades. Specifically, this chapter will discuss the role of governmental, bilateral and multilateral transnational agencies in the introduction of vocational education in Brazil and Colombia.

In a situation of dependent development, as chapter one discussed, socio-economic structures are influenced by external factors, which help to create and maintain this situation of dependence. As a consequence, educational structures in the societies of Brazil and Colombia tended to copy foreign models and ideas in linking education with economic development.

Following the central argument in chapter one, this chapter argues that:

1) During the sixties and seventies a series of educational programmes directed towards the Latin American countries, assisted by international agencies, were aimed at
changing the structures and purposes of secondary education in the direction of vocational education.

ii) Before the introduction of vocational education programmes, which only emerged after Brazil and Colombia entered into a phase of economic expansion supported by international aid, the United States had steadily put forward their cultural aid policies to Latin America.

iii) Foreign aid programmes, directed by the United States to Brazil and Colombia, were linked to the specific policies drawn up to support economic development in Latin America as well as maintaining U.S. hegemony in that continent, through proposals put forward by Alliance for Progress after the Punta del Este Conference in 1961.

iv) The alteration of internal economic and social policies, to allow the countries' pursuit of a specific kind of development, was made possible by connections between the local elites, the state, and the external agencies, which provided technical and financial assistance to development policies.

v) Latin American dependent development required two things in the view of foreign advisors: the improvement of the elite's educational level and the maintainance of control over the lower strata in terms of their social demands. Both kinds of aims were expected to be achieved
through the educational policies offered to the countries via international aid.

To test these arguments, this chapter will be divided into two main sections; the first section will focus on the genesis and role of the initiatives from the United States bilateral and non-governmental agencies directed towards Brazil and Colombia; the second section will look at the other international agencies' programmes and advice aimed at promoting educational innovations, and especially the reforms of vocational education.

3.1. American Influences

The purpose of this section is to identify the role of North-American foreign policy, mainly through the action of the Agency for International Development, in the determination of educational innovations in Brazil and Colombia, between the 1950s and 1970s, including vocational education.

This section argues that United States foreign policy has been active in providing various cultural programmes in Latin America since the second World War. Those programmes, it will be argued, had the aim of transmitting American values and attitudes to those countries [1]. In other words, the United States' influence on cultural and educational
programmes in Latin America originated within the spheres of influence established after World War II by the U.S.S.R. in the East and the United States in the West. Specifically, it is argued that in a second period after the mid sixties, the United States' policies for the Southern part of the continent sought to influence cultural, social and economic structures to make them fit the goals of economic and social development. This section also argues that the roots of educational reforms of the 1960s and 1970s lie in the policy of cultural assistance in the fifties, created by the Department of State and supported by private and governmental institutions in the United States.

These arguments will be pursued through the analyses of these policies offered by researchers such as Octavio Ianni and Jan Black as well as by the participants in their elaboration such as William Y. Elliot [2].

To pursue the arguments section 3.1 will be subdivided into subsections 3.1.1, 3.1.2, 3.1.3, 3.1.4, dealing respectively with the early cultural programmes from the United States, the rationale of these programmes, the American influence on educational policies in Brazil, both general policies and vocational policies, and American influence on Colombian general and vocational educational policies.

This section will deal first with the context within which policies were elaborated and put into practice. The
intention is to understand the educational effect of such programmes, including the effects on vocational education in the host countries.

Such policies have been interpreted under two polarised perspectives: first, their proponents believed in the good purposes and benign impact of the policies for the host countries; second, their opponents, especially those located within the dependency perspective, have seen those policies as damaging to the interests of the local society.

The present analysis tries to avoid the polarization of both interpretations. Instead, the programmes, and these policies are seen as a product of a contradictory situation: the effort to change and to make local education institutions and values adequate to a kind of development based on an international model.

Although the relationship between the United States and the other countries in Latin America was firstly influenced by economic and financial interests [3] this section will deal mainly with the cultural policies, which included educational advisory committees, and vocational education programmes. After a brief review of the analyses previously drawn by a number of authors, this section will outline the programmes trying to offer a new insight into the effects of such ideas, values and structures on vocational educational aims and secondary school structures in Brazil and Colombia.
Octavio Ianni [4] indicates that since the end of the Second World War, the United States government has dedicated large amounts of material, organizational and intellectual resources to establish its cultural international policy. The cultural policy acquired a special connotation and urgency within the context of the Cold War, which was an important part of definition of international relationships after 1946-47 [5]. Ianni's argument is also found among North-American policy-makers, who stressed the political context, as the background to the effort to establish a foreign cultural policy. In a discussion paper during a meeting to discuss the improvement in foreign aid programmes William Y. Elliot stated:

Our post-war foreign aid programs were geared primarily to "economism" at ever higher levels. They sought to satisfy the "revolution of rising expectations" by offering bread and roads to the peoples of Latin America, the Middle East, and Southeast Asia, and later to tribal and ex-colonial Africa. In retrospect, it is clear that our first efforts were too much shaped by expecting miracles from reliance on "economism" where they should first have been directed toward bolstering groups who could rule these countries and rule them effectively, developing the bases for later constitutionalism, while keeping them from falling into the Communist trap. In other words, our first effort should have been, and can still be, one of education: real education that trains those
political leaders and their civil servants and technicians and supports those who can keep their countries on the road to stable freedom [6].

The end of the Second World War coincided with a series of United States governmental acts aimed "to gain and to preserve allies" through "the conquest of opinion" [7]. The Fulbright Act in 1946, the Smith-Mundt Act in 1948, the Point Four Programme of 1949 and the Fulbright-Hays Act in 1961 are all governmental documents expressing the theoretical and practical foundations of North-American policies on international relationships in order to preserve the United States' dominant role [8].

To promote the "conquest of hearts and minds" the United States mobilized large financial resources, organizations, intellectuals, entrepreneurs, diplomats and social scientists. They acted as cultural advisors and councillors, conducting such roles through cultural diplomacy. Many agreements, treaties and programmes, of the period, both bilateral and multilateral, made specific and extensive references to questions of cultural co-operation and cultural action in education, science and culture [9].

In the next subsections the influence of such programmes will be established and analysed as a consequence of the international subsidies of Latin American economic development.
3.1.1-The beginning of the United States' educational programmes

This subsection will deal with the various policies addressed by the U.S. to Latin America to reinforce American influence over the process of economic and social development. This part of the chapter will examine the policies specially designed by U.S. official and quasi-official aid agencies for Latin America. In particular, it will look at the role of organizations such as the Alliance for Progress, ALPRO and the U.S. Agency for International Development, AID.

It is being argued, following argument (ii) of this chapter's introduction, that prior to the 1960s, United States cultural aid policy was related to the major aims and purposes of the United States in establishing and maintaining their hegemony in the Hemisphere.

Educational agreements and programmes became an important element within those policies. Education was amongst the cultural aspects regarded as playing an important role in the building of a favourable climate to the image of the United States [10]. In particular the establishment of educational guidelines by the Inter-American Council of Culture in Bogota in 1948, was a first stage in the Latin American search for development within the same values and perspectives as those of the United...
States. In that first stage, U.S. cultural policies emphasized most the ideal of Pan-Americanism or continental solidarity, instead of "economic development". Behind aid policies towards Latin American countries, the United States sought political consent, which became more evident, from John Kennedy's term in the White House [11].

For this reason, education, at the first phase of U.S. foreign policies in Latin America, was counted amongst cultural policies. The cultural programmes may be seen as the precursors of the subsequent educational programmes including the vocational ones later addressed to Brazil and Colombia.

The cultural foreign policy towards Latin America started soon after World War II [12]. The first international multilateral organization aiming to build a pro-United States mentality in the Americas was the Pan-American Union, under the leadership of the United States. For that purpose in 1948, in Bogota, the Inter-American Council of Culture was established with specific aims such as:

1. to promote the adoption of basic education adapted to the needs of all the population groups of the countries;
2. to promote specific programmes of education and instruction for the indigenous masses;
3. to promote the co-operation of the American people in the field of education, science and culture, through the exchange of: investigation and study materials, teachers, students, technicians.
and useful elements and personnel to achieve these propositions; to promote the education of Latin American people in view of the international cooperation [13].

From 1960 onwards new and more sophisticated cultural policies became part of different sorts of agreements and co-operative programmes.

It is suggested here that United States foreign policy on cultural aspects changed its priorities and methods after the fifties. Consequently, the way the educational programmes were to be proposed also changed [14]. Past experiences, with educational and cultural programmes, were reassessed when, in the sixties, the United States government, under President Kennedy, decided to make cultural foreign policies more effective [15]. For that purpose discussions were held at Harvard University and seminars and meetings were convened to decide how to improve cultural policies [16].

Two lines of approach can be perceived when one examines the papers and speeches addressed by the people involved in such a policy-making: first, the former distinction between East-West political spheres, which stressed the importance of keeping the values of the American way of life passing to the less developed world was reaffirmed; second, a more pragmatic view emerged, then,
stressing the need for an improvement in local conditions through American and multilateral assistance. The last view has prevailed since the beginning of the sixties, and its most outspoken organization was the Alliance for Progress, known as ALPRO, directed specifically towards Latin America [17].

Another instrument to promote policies related to this same model of development, was the Agency for International Development, AID. This organization, created by the U.S. government, has had a considerable impact upon the cultural and educational programmes introduced in Latin America during the last three decades. The commitment of the United States’s government, to political alliance with Latin America, led Congress to pass a Law giving AID the functions of representing and administering the United States interests in the Alliance for Progress. AID would carry out its activities under the External Aid Act, which legalised North-American foreign activities through assistance programmes and loans to less developed countries [18].

The argument here is that U.S. cultural policies were part of a major context, which led the United States to reaffirm its foreign policy to maintain the alliance with Latin America. As the American author Jan Black has emphasized, the Punta del Este Conference, which created Alliance for Progress and subsequent policies, was a consequence of the Cuban revolution and Cuba opting for
socialism [19]. Cultural policies and other forms of aid were then conceived to help the other Latin American countries to develop within the capitalist framework, instead of following the Cuban example.

External aid from the United States came in the form of grants, loans and bilateral programmes. Within these, ALPRO's education programmes comprised the most ambitious package of reforms offered to the continent.

These programmes were intended to bring modernization and socio-economic improvement to Latin American countries. As a modernization instrument, these policies aimed at the restructuring of the main local institutions, which would contribute to changing the social and economic characteristics of the region. Significantly, among the general policies recommended by ALPRO was the extension of the opportunities in vocational, secondary and higher education [20].

Such an ambitious programme was hampered by a number of external and internal factors, which will be discussed in the next chapter, but there was also comment on the Alliance of Progress in official documents which were very critical of its achievements in education [21].

Thus, it has been suggested that American interests in Latin America led to the establishment of various programmes
specifically designed to preserve the alliance between the United States and Latin American countries.

These major assistance programmes were set up to provide the ideas and resources which could influence the change in local socio-economic structures.

In a previous period, successive organizations operated by the United States government, or sponsored by their administration, were engaged in the promotion of a favourable view of the progress achieved by the North-American nation in the less developed countries. At that stage those programmes consisted more in cultural exchange, communication and language-teaching programmes, which were carried out by governmental and private organizations from the United States [22].

During the sixties, when the Latin American continent had already experienced some initial economic and social development, a new approach was necessary to update those former policies. Amongst the various programmes of co-operation and aid put forward by the United States in the sixties, vocational education was emphasized as one of the most important targets [23]. The next subsection will describe the rationale which guided these programmes.

3.1.2 The rationale of educational programmes after the Punta del Este Conference
The purpose of this section is to establish the main rationale behind the educational programmes suggested by the Punta del Este Conference, which was the starting point for most of the recent educational reforms proposed during the sixites and seventies in Latin America.

It will be argued, in parallel to argument (iii) in the introduction of this chapter, that the Conference had a significant role in the history of changing educational systems in the continent and that United States influence became more explicit and systematized, following the Conference recommendations. Such United States inspired policies, once implemented, had an impact on most of the educational reforms adopted during the last three decades in countries like Brazil and Colombia.

It is also suggested that the ideas expressed through Punta del Este recommendations were in tune with the beliefs shared by both North and also by many Latin Americans about the inevitability of the continent following the road to progress [24].

Education was thought to have an important role to play in development, as was exhaustively stressed then in both academic literature and official documents [25]. According to Adriana Puiggrós, changes, proposed for the Latin American systems of education by the Punta del Este Conference, were based upon the early theories of
modernization [26]. This also implied the view of education as an instrument of economic development, following human capital theory [27].

To understand the role and influence of Punta del Este, and the subsequent programmes established to accomplish its recommendations, it is necessary to analyse the beliefs behind the foundation of those programmes. This subsection will analyse the propositions of Punta del Este and also some of the ideas which preceded educational pressupositions highlighted at the Conference. In the view of Punta del Este's participants, Latin American traditional systems of education, especially at the secondary and higher levels, were not adequate for societies seeking development. As the previous chapter has discussed, access to and the meaning of schooling in societies such as Brazil and Colombia made education still a privilege of small groups.

The poor provision of education was seen by foreigners as a cause of backwardness in those countries, instead of a symptom [28]. The Conference then tackled this weakness by recommending policies with a view to improve the educational systems. Although this was not the first conference to deal with goals for education in Latin America, it was the first time that there was an explicit recommendation for Latin American countries to adopt ten-year plans to pursue the aims outlined by the Conference such as:
To modernize and expand the means for secondary, vocational, technical and higher education; to increase the capacity for pure and applied research as well as to promote the qualified human resources required by the developing societies [29].

ALPRO's ten-year programme for educational expansion and updating was a comprehensive list of innovations to be introduced in order to allow the countries to achieve modernization standards. It analysed problems related to primary education, middle school systems and universities. The plan urged the reformulation of national systems of education to permit them to serve the aims of economic growth.

Moreover, the programme stressed the necessity to build a "cultural policy of counter-insurgency" and improve inter-American solidarity. It recommended the re-orientation of the whole educational structure, methods and contents at all levels, adaptation of teaching to advanced knowledge and scientific progress. Such goals were aimed at meeting the "cultural needs of the Latin American countries", taking into consideration "the exigencies of their social and economic development"[30].

The aims of the educational policy proposed by ALPRO have been analysed by some writers in terms of its intention to create measures which would permit the pursuance of the
capitalist route to development [31]. According to Octavio Ianni, these measures were intended

to open middle and higher education to the dissatisfied middle classes subject to a 'reversal of expectations' and to an increasing 'incongruency of status'; to modernize the educational system as a whole, through the centralization of administrative guidelines, controlled by federal government; to give priority to technical and professional education; to change the teaching of humanities and social sciences; to de-politicize the educational relationships and students' and teachers' organizations [32].

If one examines the proposals for educational reform in Latin America, specifically in Brazil and Colombia, some of the suggestions to reform educational systems went indeed in the direction pointed by Ianni. However, a systematic study of the overall North-American influence on Latin American education in terms of values, concepts and practices is still lacking to extend this conclusion further to other levels of schooling [33].

Successive missions were sent to Latin America by the United States government to diagnose the educational situation and the existing demands in this field. Those envoys and missions could be seen as being part of the United States Department of State's concern with Latin
American development. Whereas this had a positive aspect which was to approach the reality of Latin America and to try to improve it, it had also a negative effect. This was because these missions and their subsequent policies stimulated the copying of foreign educational models [34].

Two aspects were emphasized by the missions' reports and recommendations for Latin America in general: the association of education with the economy and the building of a pro-United States leadership. The Rockefeller report, as an example, insisted that "a good educational system is absolutely essential to produce a good leadership" [35]. In the opinion of that particular envoy, the provision of education in Latin America was very poor, though more support was needed from both American public and private sectors to produce educational improvements in that part of world.

The discussion about the necessity of United States' support and assistance towards Latin American economic development and educational improvement was also extended to other groups and found a place in the thinking of scholars and politicians during the fifties and sixties. Some ideas which underpinned the expression "preparation of the leadership for the modernization of Latin America" emerged at the numerous meetings held in the United States to discuss North-American assistance to the region [36]. With that purpose the United States promoted a series of
discussions and sought to involve Latin Americans in seminars and conferences about the policies and development needs.

There was in that period, and it was expressed by many scholars, the feeling that the Latin American elites were not able—because of their lack of preparation, and also their ideological bias—to conduct change from a traditional to a modernizing society [37]. In 1961, a conference in Washington D.C. sponsored by the Department of State and the International Council of Teaching Associations issued recommendations for the consolidation of national leadership in Latin American countries, according to ideas prevailing in the North-American think-tank [38].

Although the initiative in forming new leadership in the Latin American countries came from the United States, the participation of the Latin American elites has been a noticeable element in the discussion and elaboration of the guidelines of the assistance policies. The assumptions, about the necessity to support a pro-United States leadership, were shared by some of the moderate politicians such as Rómulo Betancourt, in Venezuela, and Lleras Camargo, in Colombia. Both of them were singled out by their U.S. colleagues as examples to be followed [39] in Latin America.

The guidelines of the programmes, and the conceptualization behind them, were also discussed with representatives of the countries which would be the
recipients of foreign aid programme in specially called meetings [40]. In other words, the representatives of recipient countries should inform the donors what ideas, values and practices should be placed in the programmes to fit the Latin American process of development.

Overall, it is suggested that the various conferences, meetings and discussions about foreign cultural policies and educational aid were part of a wider context. Behind programmes and recommendations were North-American vested interests which were decisive in making Latin America become modernized.

Further discussions will follow in this chapter and in the next two chapters to reassess this point: the international context provided an interrelationship between educational policies, foreign assistance and economic development. The next section will look at how those policies acted upon Brazil.

3.1.3 The American Influence on Educational Policies in Brazil

The purpose of this section is to analyse the United States' assistance and co-operation in education programmes
to Brazil, between the period immediately after World War II and the 1970s.

This section links with argument (iv) in this chapter's introduction, and suggests that the programmes issued with the aim of assisting Latin American countries in the improvement of their education systems had a wide purpose. When the United States' purpose is analysed, it is clear that aid to education, as well as to other sectors, was linked to governmental and local efforts to improve conditions for modernization [41].

Specially designed reforms were planned to allocate resources and to restructure the educational system in pace with a new model of economic development. There was to be a continuous involvement of governmental and non-governmental organizations (such as the industrialist groups), in the discussions about educational and other assistance programmes being proposed to countries such as Brazil and Colombia [42].

To discuss these arguments, this section will be subdivided in two parts dealing with educational programmes in general first, and vocational education programmes in the second part.

3.1.3.1. United States' education programmes
This subsection will look at some policies that were brought to Brazil in the early forties and fifties until the period of military rule. The description of some of these programmes will provide an illustration of the U.S. influence at various levels of the education system.

This section argues that the United States aid policy was of such relevance, especially during the sixties, that specific guidelines were issued by the government of that country to allow the action of aid institutions. In addition those policies accompanied the increased involvement of the United States' interests in the process of Brazilian economic development. The effort to assist educational improvement was directed towards targets chosen by those responsible for foreign assistance, with scant concern for chronic educational problems such as illiteracy or universal primary education.

In pursuing these arguments, this subsection will examine the policies in chronological order. In Brazil, the North-American assistance to educational programmes went through different stages. The first educational programmes were developed during the process of "import substitution". This stage involved isolated programmes to help the development of technical and agricultural education.

The next stage consisted of a series of policies to fund and assist improvement of primary education during the phase of consolidation of industrialization. The process
culminated with the proposal of a series of programmes and plans to change the whole educational system, after the inauguration of the next phase of "associated development" period, after 1964.

In order to put the programmes forward, North-American assistance on educational policies in Brazil began with the formation of bilateral committees within the Brazilian Ministry of Education. In this early phase, educational advice was limited to special committees with very specific aims. One outstanding example was that of industrial education, which was created and maintained with North-American funds and advice. For a country undergoing industrialization, it was essential to create a manpower-training apparatus, and in January 1946, the first bilateral agreement was signed to assist in the area of industrial education [43].

Industrial education and training received special attention with the establishment of the Comissão Brasileiro-Americana do Ensino Industrial (Brazilian-American Committee for Industrial Training), CBAEI [44]. The leadership constructed by CBAI during the 1940s and 1950s, up to the 1960s, influenced the first steps for introducing a new kind of middle level school in Brazil.

The second stage started during the fifties, when the Point Four programme from President Truman's Declaration [45] served as a basis for programmes of technical
cooperation put forward by the United States government. In that period, two agreements were signed between the two governments: the Basic Agreement for Technical Cooperation and the Agreement for Special Technical Services, a package of one hundred projects related to education, agriculture and administration [46].

Another agreement, in the fifties, was signed in September of 1956 between the Ministry of Education and Culture (MEC) and the United States Operational Mission for Brazil, whose main objectives were to support the creation of a pilot-project in Rio de Janeiro to train secondary school teachers to establish a six-year secondary level programme; and to prepare teaching material [47].

This succession of agreements confirmed North-American determination to assist - through projects and different policies - the process of economic and social development of the country.

One example of how the policies of development were highly regarded by USA politicians is the specific legislation put forward with the purpose: "help other countries' development". In 1961 the Foreign Assistance Act [48] emphasized the role of United States technical assistance to less developed countries and projects were expanded under the influence of the Agency for International Development (thereafter called USAID). This legislation completed the Point Four recommendations and consolidated
the 1957 Development Loan Fund. The technical assistance prescribed by that law was aimed at the

improvement of the educational, technological and professional levels; improvement and expansion of institutional structures and practices; evaluation of human and material resources; design of development plans; establishment of a infrastructure for development [49].

All the former assistance programmes were confirmed and new programmes for financial assistance were established under the form of loans or grants, after the signing of the Punta del Este Charter in 1961 [49]. This showed the interest of the United States in maintaining their grip over the development of the region, since the policy of aid institutionalized previous efforts, and was carefully orchestrated [50].

The last phase of the United States aid policy to Brazil coincided with the period when USAID investments in the continent were at their highest level. As a consequence, there was a steady influence on educational programmes with the proposal of a variety of reforms directed mainly towards secondary and higher education.

The most long standing and comprehensive of the agreements between Brazilian government and USAID were the so-called MEC-USAID agreements, a series of programmes for technical and financial assistance issued during the late
sixties and early seventies. USAID, as the Agency was known in Brazil, was during that period, with the Food for Peace and Export and Import Bank, the main channel for United States' influence in Brazil [51].

USAID's concern with education was expressed through a number of documents and reports about the policies and aid programmes for each specific level of education. The Agency's efforts first concentrated on higher education reforms and directed actions to modernize and expand that level of education and training, which was responsible for the preparation of human resources for economic growth: e.g. managerial personnel, engineers, high technology specialists and university-teachers [52].

In 1964, the programme for the improvement of higher education, issued by the Agency, openly advocated that "the crucial level to interfere in the educational scenery and one of the most strategic areas to aid national development was that of higher education" [53]. Such a statement confirms the preoccupation of the United States foreign policy with supporting mainly the industrial section of countries undergoing a certain degree of development.

USAID even drew up the estimated number of university students required to cope with the needs of the country's development. In this same report USAID warned that: "the number of people in training at higher education
institutions at this moment is extremely low for responding to the needs of a rapidly changing society" [54].

There also was a stress on giving priority for higher education in the USAID's projects, on the argument that the problems in primary and secondary levels of education were so complex that they could not be solved through limited North-American aid resources. Higher education was chosen for assistance because it "would give opportunity for an effective impact with limited resources" and also could later have the effect of stimulating changes at other levels [55].

As was mentioned in the previous sections of this chapter, the United States policy during the sixties reflected the conviction that modernization and capitalist development were a result of investment in human capital resources. Thus USAID's rationale was to help countries like Brazil, providing both financial and educational assistance in order to meet the country's developmental needs. The university level was chosen to be the first to receive assistance, because it was to provide the personnel for the development of the economy.

It has been noted, by examining the USAID's reports and documents, that when the USAID's officials later evaluated those programmes they tended to criticize recipients for the eventual failure of certain aspects such as the quality of education. The programmes had a great impact at the
beginning; however, the recipient countries were to be unable to accomplish all the requirements for implementing the reforms, because there were not enough resources and because of internal divergences amongst the planners, government officials and the U.S. agency [56].

What USAID provided were packets of educational and financial assistance which were dependent on variations of the United States internal policy and the international financial market. With the reduction of cash flow to the Latin American countries, in the mid 1970s, and the abandonment of the special favourable conditions, which only prevailed during the period of the Alliance for Progress, most of those programmes were jeopardized [57].

Analysing the USAID’s policies towards higher education, it is possible to see that there was a contradiction between USAID’s preference to assist the university level and all the previous rhetoric following the human capital theory approach. This theory supported the idea of improving all levels of education in order to provide better skilled human resources for economic development [58]. However, in USAID’s view, managerial skills were more important than the specialized worker skills in the Brazilian case.

However, the role of USAID on educational policies after 1964 had an impact in changing the educational system. Many agreements were signed, and various programmes were put
forward for the different levels of education, including vocational education [58].

3.1.3.2. United States programmes on vocational education

This subsection will offer an analysis of a concrete situation of educational reforms influenced by foreign assistance: USAID's proposals to introduce vocational education in Brazil.

It will be argued, in connection to argument (i) in this chapter's introduction, that Brazil's acceptance and efforts to improve policies such as vocational education from 1964 onwards, were interconnected with economic development values and policies, which have an international basis. Possibly this interconnection has not functionned as expected in economic terms. However, the rationale that was behind such a policy was powerful enough to cause education structures to be shaped in accordance to it.

This subsection argues in connection to argument (ii) that it is possible to distinguish various kinds of North-American policy directed to the educational sector in Brazil. First, the United States' influence on Brazilian education was carried through a series of agreements settled between the Brazilian government and United States official bodies.
It is also being argued, following argument (iii) of this chapter's introduction, that from single agreements and isolated programmes this influence increased after the sixties, following some major changes in the United States external policy towards Latin America.

In order to discuss these arguments this subsection will put forward a description of the educational policies and the process of their adoption by Brazilian government.

Throughout the whole process of industrial modernization and manpower qualification, Brazil was assisted by co-operative programmes from the United States. The American influence was enhanced through the establishment of different committees which were located within the Ministry of Education.

From industrial and technical education programmes this influence was transferred to most educational fields and levels contributing to a large innovative trend from primary to higher education. However, the more pervasive U.S. co-operation and influential ideas were those affecting vocational education through a series of programmes initiated during the 1940s-50s and culminating with the programmes under the MEC-USAID agreements.

Under the military regime which started in 1964, Brazil underwent a major change in its developmental policies. The American influence flowed through a more systematized mechanism: the MEC-USAID agreements [60]. It is suggested
that it was this influence which oriented the major changes in vocational education policies between 1964 and 1971. The United States programmes of assistance to Brazilian education since 1967 have been characterized by their emphasis on technical assistance to secondary education and the improvement of educational planning and administration [61].

The literature about education policy-making in Brazil after 1964 is unanimous in suggesting that the complete transformation of primary-secondary level structures, in 1971, was a consequence of those studies and projects under the influence of MEC-USAID agreements [62]. These protocols also had a decisive influence on the restructuring of educational federal administration, which became more centralized.

In 1965, a bilateral agreement stressed the improvement of national and state-level education planning, following the view that the lack of planning was one of the factors that constrained economic development. The objective of this project was to provide assistance to State education officers in planning secondary education, as well as training Brazilians in better planning skills. The result was the creation of the Equipe de Planejamento do Ensino Médio (The Middle Education Planning Committee), EPEM, which was composed of MEC officials, and by staff from the
Departamento do Ensino Médio (Middle Education Department), DEM [63]. As a result of this planning action, another project was organized, the Programa de Expansão e Melhoria do Ensino Médio (The Programme for Expansion and Improvement of Middle Level Education) PREMEM [64]. This committee of joint USAID-Brazilian staff would work for two years to provide assistance to the federal states to establish planning units. Since 1966 it has carried out a comprehensive study of Brazilian education to establish priorities within the education system and to identify the major problems to be tackled.

The official report that evaluated USAID's contribution to Brazilian education suggested a complete change in educational structures, to be implemented by the agency. In a study completed in June 1967 the agency "identified a host of financial, institutional, and pedagogical problems at the primary-secondary level, which were analysed as constraints on the efficiency and effectiveness of the Brazilian system" [65]. One of those constraints was the fact that under the 1961 Education Law, primary and secondary education were fully decentralized and subjected to administration by the federated states. Advisors from United States criticized the effects of decentralization:
At the time of this decentralization, the states were ill-prepared to assume the burden, particularly at the secondary level, because their administrative capabilities were weak and their financial resources inadequate to cope with the growing operational and expansion needs [66].

So, if the development of education in Brazil was to depend upon technical plans and loans to become a reality, these tools for educational improvement needed to be provided.

The first loan following the bilateral agreement in June 1968 was for $32 million to assist the Brazilian government to expand and improve secondary education primarily in four States. This programme involved various purposes such as: "constructing new school facilities, equipping these schools to make the physical facilities fully operational, training teachers and school administrators and developing a balanced curriculum." [67].

A second educational loan for $50 million was authorized after the renewal of the original bilateral agreement in June 1970 [68]. That implied new practical measures primarily to improve the use of Brazilian financial and manpower resources in the primary-secondary system. The training of Brazilian human resources was the major objective of this loan: the Brazilian government was responsible for sending specialists to be trained in the
United States and that country's responsibility consisted of providing special courses for them at San Diego State College Foundation [69].

All the rationale and logistic support for a major education reform were present in many of the documents issued by USAID, from 1965 onwards. The analysis of the weaknesses of the education system was followed by solutions proposed to "solve many of the deficiencies of Brazil's education system" [70].

In 1972, following suggestions of the last loan-agreement, the EPEM committee became part of the administrative structure of the Ministry of Education involved in education planning. After that, all the agreements and the documents which had backed the loans to education played a fundamental role in changing the whole structure of Brazilian education and of its national administration [71].

All the projects developed between 1966-1970 were to be implemented in future education reforms. The multipurpose and diversified scheme of post-primary education, which was introduced via North-American assistance by EPEM, came out as the pilot scheme for the future reform of secondary level. With a comprehensive curriculum, this new vocational scheme, known as "Polyvalent Schools", was a similar to what was later implemented in Colombia: the INEM [72].
The participation of USAID included financial assistance for manpower resources and the building and equipping of schools in the states which participated in the project. As a counterpart, the Federal Government was then responsible for the administration, and the future restructuring of the education system [73].

These schools were constructed in four Brazilian states and initiated a pre-vocational curriculum experience which should have been extended later to other schools in the formal system. However, the experiment of PREMEM's schools, as they were known, was curtailed after Law 5692, in 1971, extended compulsory vocationalization to the whole secondary system of education [74].

This experiment has been therefore the precursor of vocational education reforms. This programme also shared similarities with other educational programmes introduced in Colombia with USAID's help. However, in Brazil its implementation was difficult because of internal disparities. In the next chapter the process of changing the vocational education policies in Brazil and Colombia will be discussed further.

Overall this subsection has demonstrated how the U.S. through various means influenced the modernization of the educational system in Brazil. This influence became effective through programmes intended to help the country improve the educational system to make it fit economic
development, by introducing vocational education to replace traditional secondary academic courses.

In other words, due to a lack of tradition in the implementation of a pragmatic kind of education, the country needed foreign advice when industrialization expanded, to cope with demands for skilled workers. The Brazilian authorities were advised and assisted by the United States, which had already co-operated over the installation of an industrial infrastructure [75].

3.1.4. The American influence on educational policies in Colombia

The purpose of this section is to analyse the United States' influences on educational policies in Colombia.

It will be argued in this section, following the main argument (ii) that the programmes offered to improve Colombian educational system were part of a major policy, provided to pave the road for modernization. It will be also argued, following argument (iii) at the start of the chapter, that the creation of multilateral organizations, after World War II, opened the door for an in-depth involvement of international agencies in Colombia. These agencies acted in parallel with the United States in
preserving its influence over Latin America, through strengthening cultural and political alliances.

These foreign influences were backed from inside the country by politicians and policy-makers who mediated them, according to the main argument (iv), and transformed Colombian educational system into a kind of laboratory to test new educational policies linked to economic theories [76].

U.S. influence on internal policies which has been always pervasive in Colombia was increased, after the National Front came into power in 1957. The basic difference in terms of U.S. influence in Brazil's context is that United States' assistance and co-operation in Colombia was shared with other foreign agencies and missions, under specific governmental requests [77].

It is also suggested that the reasons for the strong role played by foreign influences on the Colombian educational system are historically rooted in the dependence on trade of agricultural commodities [78]. Early economic dependance led the Colombian elite to be attached to European in the colonial past, and later, to North-American economic power. As a consequence, cultural patterns from these societies tended to influence the Colombian upper classes. Therefore, what happened in the educational field, was a consequence of the long cultural attachment to foreign models informing Colombian economic and social development.
The analysis of the various programmes and plans issued with foreign assistance and based on foreign criteria will show how they influenced the educational changes which occurred in Colombia between the period immediately before the National Front and the period that followed this political transitional term.

As in Brazil, educational policies in Colombia followed more or less the development of the economy: first the process of import substitution, with programmes to expand education in the fifties; secondly, during the process of consolidation of industrial expansion in the sixties and the introduction of vocational programmes, and finally the phase of an internationalized economy and the reform of the educational system as a whole, which occurred during the final stage of National Front and the first governments out of the pact.

This long tradition of foreign influences on the Colombian national system of education has been pointed out, by Richard Renner and Aline Helg, as one of the characteristics of schooling policies in this country. In his survey of education in Colombia, Richard Renner clearly demonstrated the will of the country's elite to adopt foreign patterns as a way to "develop" Colombia, or at least, to emulate its more powerful and prestigious trade partners:
The cultural prestige of Western Europe and the political influence of the United States in world affairs have further contributed to Colombian interest in foreign institutions and ideas [79].

Aline Helg found another justification for the sympathetic approach to international agencies by Colombians: she notes the considerable dependence of Colombia on foreigners to pursue its path to development [80].

Thus this section will discuss some highlights of the process of foreign assistance, which preceded and prepared the United States influential role into Colombian education. It will cover a particular period of Colombian recent history: since the end of World War II.

In 1946, the Colombian government became a member of UNESCO, and the President's Permanent Council, created in the following year, had as one of its responsibilities to act as the national committee for UNESCO. This was one of the first steps designed to attract financial assistance for education in the country [81]. Furthermore, a Colombian sense of opportunity saw the creation of the Union Panamericana (Panamerican Union) in 1948, as part of the recently created Organization of American States, OAS, as another source of external finance and technical assistance [82].
The policies from international assistance to education in Colombia were channelled through the influential ICETEX, Instituto Colombiano de Especialización Técnica en el Exterior ICETEX (The Colombian Institute for Educational Loans and Advanced Training Abroad), which was specially created to train manpower with external aid [83]. The role played by ICETEX and its creator, Gabriel Betancur-Mejía, was decisive on the subsequent development of education modernization in Colombia.

The foreign influences upon the Colombian educational system continued on a two-way path: Colombians were encouraged to go abroad for their higher education and Colombia was granted loans and technical assistance by external sources to develop the Colombian higher education system. It was also accepted by government and politicians, that institutions like ICETEX were needed to improve the interrelationship between industry and the training of a cultural and economic elite. In the following years, ICETEX's role expanded with the support of the National Committee of Economic Affairs, i.e. the economic elite involved in the incipient industrialization of Colombia [84].

In Colombia, the Universidad de los Andes was the first institution of higher education to sign an agreement with the Institute. The North-American influence upon Colombian higher education increased due to the fact that half of the
scholarships sponsored by ICETEX were awarded in the United States [85].

Another influence that became overwhelming in Colombia was that of USAID [86]. USAID was the main agency in the days of the Alliance for Progress in the sixties, and it put forward its own ideas on educational and other social policies. Those ideas were developed through studies carried out by its own experts or scholars commissioned to make surveys about the needs in Latin America for educational improvement. It was not a coincidence that similar educational policies were proposed in different countries such as in Brazil and Colombia.

In Colombia, as in Brazil at the same time, various surveys were carried out in order to investigate educational needs for a modernizing society. One such study was the report made by T.P. Schultz, sponsored by AID and the RAND Corporation with the objective "to help AID formulate policy and establish priorities in Colombia and at the same time illuminate a more general class of developmental problems throughout the world"[88].

The study of Schultz for Colombia is significant to test the argument this chapter is pursuing, that education was seen by those who develop the education assistance programmes as an important complement to economic development needs, and also as an instrument to keep control over social demands.
The author, who was responsible for the development of a new theory on economics of education, was directly involved in the diagnosis of Colombian educational needs. Certainly Colombia would provide a vivid example for that school of thought which interrelated education and economic development.

The study, based on assumptions about the association between schooling level and earnings, was set up "to estimate the effect of education on the productive capacity of labor in Colombia" [89]. Two sections of the report tackled questions relating to the evolution of educational policies in Colombia with implications for future aid programmes. One was the analysis of the social income rate, which stressed the necessity of expanding with public funding the two lower educational levels, rather than the university sector, as a means of avoiding social unrest [89].

The second aspect of this report which will be discussed here is policy priority. In this particular, the author stressed the necessity of a "national educational policy" as a way of finding out "the best social allocation of resources" for education. For this author, a country's educational policy should find ways of motivating people to "acquire and to use their education in employment where social returns are the highest" [90]. That assumption clearly indicates that education was seen as a tool to improve
income and consequently a powerful instrument for the
government. The economic component is central to this theory
which proposes educational policy as a means of increasing
labour productivity.

Schultz's study also raised some guidelines of
fundamental significance for educational choices to be made
by Colombian authorities. One of these guidelines referred
to the destination of public funds to the various levels of
the educational system. The study predicted further pressure
to expand secondary and vocational schools and a consequent
decision which would have to be taken, to sacrifice quality
in order to provide schooling for a greater number of the
younger generation [91].

By associating the lower birth rate in certain regions
with the expansion of schooling, the study underlined the
importance of expanding primary education in rural areas of
Colombia, as a means of reducing the birth rate and poverty
in those areas. In respect of secondary and vocational
education, the Schultz study noted that these were more
profitable levels for social return than the university
level, and their expansion should be supported by government
instead of subsidizing higher education for all secondary-
school leavers [92].

All those ideas about educational policy were taken
into account and various agreements and projects were set up
by the Colombian government with the participation of USAID,
in a similar way as occurred in Brazil. In the Colombian case, previous studies and policy guidelines stressed the preference for the lower levels, at least in the early programmes. The first of these agreements, signed in 1961, established elementary and normal school programmes and the provision of teacher-training and teaching material for primary schools [93].

The assistance of USAID to Colombian educational programmes flourished between 1962 and 1967 [94]. From 1967 onwards those amounts were greatly reduced, but USAID still maintained a handful of experts, attached to the Ministry of National Education, who provided assistance in conducting a survey of higher education and of the planning of a comprehensive, multipurpose secondary school programme [95].

As the previous section has shown, as in Brazil, USAID assistance in Colombia was quite noticeable for a whole decade, especially in terms of higher and vocational education. The agency was also linked to educational planning and its influence within the Ministry of Education lasted even after the end of the agreements.

One of the sectors of USAID co-operation in Colombia that was much emphasized was the rural elementary school system. Due to the peculiarities of the Colombian political situation, this side of the educational system was regarded with special interest by educational planners.
Rural education was extended from two to five years and was one of the factors of increased demand for public secondary education. As a consequence, new schemes had to be conceived to provide more schooling. However, in this case, the school changed to another kind of curriculum specially devised for a new clientele. As a response to a great demand for secondary schooling in rural and urban areas, two schemes were planned: the \textit{Institutos Tecnicos Agricolas} ITAS, and the \textit{Institutos Nacionales de Enseñanza Média} (National Institutes of Middle Education) INEM [96].

Although proposed and planned with the co-operation of USAID, these new schemes had half of the cost financed by the World Bank and the rest of the cost by the national government. From then onwards, apparently, the World Bank took the place of USAID in the financing of Colombian elementary and secondary education programmes. However, in other areas the influence of the United States agency has lasted. That was the case of higher education, which received financial assistance through United States grants and loans for much a longer period [97].

The previous paragraphs have described the USAID policies in Colombia, as a steady influence on the Colombian educational system and policies. For almost a decade the
programmes and co-operative committees provided long-standing support to educational change.

These policies, although they were similar to what was implemented in Brazil at that period, introduced different schemes of vocational education and went on giving a different emphasis in programmes designed to attend to specific Colombian problems. Such was the case of rural and primary education reforms.

A report from USAID analysing the impact of those programmes in developing countries, observed that there was a decline in resources after the 1970s for the USAID's education programmes around the world [95]. The agency programmes in various countries, the report says, had a positive impact on improving enrollments and expanding schooling in remote regions.

Nevertheless, those programmes failed to improve the quality of education and even the projects on vocational education were not very successful. Blame was, however, put on the recipient countries:

Unable to provide financial support to both expansion and maintenance of quality, developing countries have chosen to emphasize quantity over quality. Thus while primary schools may now exist
in the most remote areas, the quality of education is often very poor [98].

The effectiveness of USAID-assisted programmes was not equally successful, the same report argues, and economic constraints, such as high inflation, led the Colombian government to curtail some of them [98]. The part of the project related to vocational education had to be eliminated because of this. Nevertheless, the impact of USAID programmes in Colombia was made effective through the maintenance of a team of American experts and policy-makers at regional and national levels [99].

In Colombia, as in Brazil, there was a shift towards other foreign sources of education finance. The World Bank, FAO and ILO have been increasing their participation in providing training and vocational education for agriculture and industry [100].

Nevertheless, this replacement of agencies did not meant any deep alteration to the long-term effect of United States influence. Furthermore, due to their previous involvement, American officials acquired a knowledge of Latin American countries which enabled them to remain as
officials and advisors in the Latin American departments of these international organizations [101].

One of the serious effects of the foreign presence in Colombian education policy-making was the extent of the emigration abroad of the educated elite itself. The brain-drain towards the United States seriously damaged the development of a national elite more committed to the national interest, to the point that it was noticed by North-American scholars, [102] who surveyed the Colombian educational system.

To sum up, this subsection of chapter 3 has analysed the participation of the United States foreign assistance in the Colombian education, going from the early influences through ICETEX and other Colombian mediators, to the late influences through USAID's programmes. The picture did not differ from Brazil's in most aspects. There was a long-term relationship between the Colombian government and the educated elite and the United States offices in charge of international co-operation.

The main impulse was given towards the modernization of the educational system through the introduction of planning offices. The influence permeated all levels of the educational system in both countries. In Colombia, however,
there was a greater interest in assistance to rural education than in Brazil, at least in USAID's programmes. In both cases, there was a lasting relationship between USAID and the Ministry of Education with the establishment of specially designed departments which would carry on the educational ideas inherited from USAID's programmes.

However, some differences also existed between the United States' influences in Colombia and in Brazil. In the former, greater attention was given firstly to programmes in higher and primary education. Only after the National Front period was the assistance to secondary vocationalization more effective.

In Brazil, the preoccupation to form a stable system of vocational-professional training was the channel for the early influences of the U.S. on educational matters. However, the way both countries were to change their secondary education system to transform them into a more practically biased system was similar in Brazil and Colombia.

The next section will look at other kinds of influences which mixed with the efforts of the United States to change education in Brazil and Colombia.
3 2. The role of the multilateral agencies and International Conferences in Latin American educational policies

The purpose of this second section is to analyse the influence of multilateral agencies; and the recommendations issued by regional conferences, sponsored by these organizations, on educational policies for Latin America.

The multilateral and regional agencies created after World War II, such as UNESCO, OAS, IDRB, IDB, [103] eventually became the instruments for spreading the belief in educational reforms as an important step to achieve development. The instrument for that consisted of the recommendations and co-operative programmes addressed to the governments of the countries aiming at becoming modernized.

It will be argued that these agencies and conferences took an important part in the definition of the model for educational change in Brazil and Colombia, during the sixties and seventies.

It is being argued here that it was possible to distinguish a uniform educational philosophy supported by the international agencies and conferences, following the
parameters laid down by the regional meetings. This philosophy informed educational reforms and was expressed through a consistent discourse at the various conferences.

Although the specialists working for these agencies produced different documents with different approaches and methodologies, most of the proposals which were addressed to the developing countries pointed in the direction of theories emphasizing modernization, e.g. aiming to make the countries "modern" by changing economic and social structures. In education, the human capital theory was their milestone, as has been noticed in the previous sections.

The international conferences on education cannot be dissociated from the role played by the international agencies of co-operation and assistance. Both kinds of organization were behind the initiatives for education reforms in the less developed countries, as a means of achieving economic and social development.

Conferences and the foreign aid provided by multilateral agencies were two instances for supplying governments with advice and assistance for developmental purposes. Those from the multilateral organizations, such as UNESCO or OAS, sponsored regional meetings and issued recommendations to serve as guidance to governments. Those
from the financial agencies like the World Bank and the Interamerican Development Bank (IDB), provided the resources to implement educational programmes. Others, like AID, eventually acted as advisor and lender [104].

So, this section will deal with the recommendations offered through two different channels for educational policies which developed similar approaches to educational change from an international basis. Firstly, the regional conferences will be discussed, tracing the main ideas which were sponsored by those organizations in relation to educational reforms. The second subsection will focus on foreign aid to educational projects as a means of putting into practice these ideas, specifically vocational education programmes in Brazil and Colombia.

3.2.1- The influence of the regional conferences

This subsection will analyse the process of international co-operation in the region as a result of the work done by the different international agencies acting in Latin America from the 1940s onwards. This subsection will argue that:

i) The activities of the regional conferences increased international influence upon the educational field in countries such as Brazil and Colombia.
ii) After the consolidation of industrialization in many countries of Latin America, the efforts of international agencies have contributed to stressing the importance of education to economic development. Consequently, the policies and programmes addressed by those organizations in this new context emphasized the need to make education fit development purposes.

iii) The policy of educational change varied, as the international context shifted. If in the early fifties the conferences' recommendations stressed the expansion of primary education, in the sixties the stress was put on better preparation of teachers and the improvement of secondary education. In the seventies the main stress shifted to vocational education.

iv) The new propositions strengthened the earlier proposals and programmes, such as the previous North-American cultural policies discussed in section 1.

Finally as a new fresh argument, it will be argued that external advisers undertook more than the technicalities of planning, and also served as ideologues for economic development and educational reformers in dependent societies.

The regional conferences' proposals to Latin American governments made a strong appeal to the modernization and expansion of education systems in such a way as to achieve the prospects of economic development. An example of this
preoccupation of the United Nations with development was the creation of new branches within the United Nations with the objective of helping the member-countries in their efforts to achieve development targets [105].

Within this developmentalist framing, UNESCO would provide the tools for improving schooling and the expansion of education. The educational effort put forward by UNESCO, and other multilateral agencies, coincided with the emphasis on modernization policies by Latin American countries. In general those conferences reflected the main ideas which permeated the international model of development and gave the guidelines for educational improvement based on it. Some examples of these policies and recommendations are listed here to illustrate arguments stated above.

The synthesis of the ideas about the development of educational policies in the 1950s was found in the project approved by the UNESCO regional Conference in Lima, Peru in 1956, and in the General Conference in New Delhi, for the Extension and Improvement of Primary Education in Latin America [106]. The recommendations issued after these meetings supported the modernization rationale: there was a need for better education both for workers and for consumers in the expanding economies of the newly industrialized societies.

It is being suggested that the movement towards educational expansion was, therefore, parallel to economic
growth; the nations had to make an effort to achieve signs of being modern in both. At first, primary schooling was due to expand enormously; after primary education expansion there was more demand for secondary schooling; when the masses began achieving secondary education then the next stage of education for development became the improvement of vocational education [107].

Most of the changes in Latin American societies were therefore orchestrated from outside, carried out through conferences, international missions and mobile planning advisors. These foreign educational mediators became, to a great extent, the instruments for educational change, including vocationalization of secondary education in Brazil and Colombia. That was a significant contribution to the modernization of educational systems and to the professionalization of the educational field. Their role influenced all levels and covered all aspects of education: from primary schools to the training of teachers and specialists.

The dominant ideas during the first stage emphasized the need for secure directives for educational changes, by improving knowledge of the real situation in the countries undergoing development. It implied diagnosis and the mapping of educational achievements in the region, support for teacher-training programmes and for some technical education projects [108].
After each Conference's recommendations were issued, programmes of assistance were created and also training schemes were set up to prepare specialists in planning. These programmes, supported by international or governmental agencies, became responsible for moulding a whole generation of experts on education made up of economists, educators and social scientists [109].

Two major projects especially designed to improve education in Latin America can exemplify the way international assistance took charge of changing educational patterns in that area. The first project started in 1959 and its aim was the improvement of primary education, the second was set up after the Punta del Este Conference in 1961 to improve the training of educational personnel. These projects followed the principles and the resolutions of the conferences [110].

The familiarity with the social and economic problems of Latin America, provided by the great number of studies and surveys carried out through their specialists, gave an articulate and comprehensive knowledge of Latin American countries to the international organizations. These kinds of contacts enabled the production of reports in which the seeds of many reforms can be found.

The 1960s would bring new considerations to the problem of "education for development". Those years were characterized by two events: a) the consolidation of
educational planning ideas and b) the control of initiatives at the agencies and conferences by the educational planners.

There was a group of ideas, of which some were put into practice and some others not, but which were recognized as the core of educational reforms attempted throughout Latin American countries. Through the regional and international conferences those ideas were passed to the governments and those responsible for establishing the educational policies in the region [111].

The reports and recommendations issued by the agencies which sponsored these international views about educational change were in accordance with the ideas provided by planners and economists who worked for both the agencies and local governments. These specialists became the ultimate policy-makers for the agencies, and some were very influential in Latin America as well as within the international agencies. They were noticed going from one to another agency, from local planning offices to the international agencies offices, to propagate the idea of educational planning. These planners also developed the belief that planning was the solution for most social and economic problems found in Latin American "underdeveloped" societies [112].

The planners and the agencies which employed them, were committed to reformist views. The main rationale was that education in Latin America was due to change and the best
instrument for that was educational planning. This can be perceived when simultaneously with the development of educational planning theories, the international agencies started their "technical-assistance programmes" to help the countries to improve their educational achievements.

All these programmes stressed the necessity to build educational plans closely to the generic economic development plans. As a condition to give their assistance the international organizations recommended straightforward analysis of the countries' manpower requirements.

Suggestions from some of the international advisors indicated a deeper involvement of educational planners in Latin America [113]. Statements made by important leaders on educational planning claimed the planners would have other responsibilities beyond the drawing up of the plans. Such statements demonstrate the concerns of the planners with the further implications of development, and not restricting it to educational improvements [114].

One of the beliefs manifested in the planners' discourse was about the power of education to achieve social and economic change. Following this belief, Latin American countries, as a rule, would be developed through educational improvement, and the majority of individuals would have their chances of employment enlarged.

The final aim of educational reforms was economic development. This could be translated into a preoccupation
with economic stagnation in the region which had been explicit in the planner's language. To solve this problem, the planning experts visualized one possibility: the attraction of foreign capital to invest in Latin America [115]. However, before investment, preparation of the future workers, professionals, and consumers was needed through a modern system of education.

Although the achievements of educational planning have been criticised by authors such as Alberto Moncada [116], the influence of that group of technicians is undeniable. They acted as educational "reformers" in most of the Latin American countries [117]. It was through their actions in the ministries of education and planning offices, that much of the foreign influence was mediated.

This kind of personnel was made available and sponsored by the various agencies from the United Nations, United States government and private organizations, and from other multilateral agencies from America and Europe [118]. Altogether they exerted a more or less co-ordinated influence towards the local government's policy on economic and social development and modernization of countries such as Brazil and Colombia.

The analysis of international agencies and conferences role here confirms what has been argued in the previous section about American influence in the hemisphere during the fifties. The policies of changing educational patterns
and improvement of educational systems were in accordance with the parameters of modernization theories. Further it was noted that the reform of education was stimulated both from outside and from inside the countries; the international agencies have been a channel to provide the support to their implementation, providing the ideas, the advisors, and finally the resources for that.

The United States, as one influential member of these agencies, supported their action on development, because of U.S. interests in countries such as Brazil and Colombia. However, the education planning activities also involved the participation of Latin Americans with strong connections with the international agencies [119]. Some Latin American planners shared the same beliefs and values as foreign planners about the economic and social policies which should be put in motion to benefit those countries.

Finally, it is possible to notice that there existed two different points of view about the actual role of the international agencies in Latin America. The first was stated in their official reports, which assumed that they have done quite a valuable work implementing social policies under a highly technical approach. Another view was that offered by local educational leaders and social scientists who criticized the whole meaning of externally sponsored and oriented projects [120].
Many of these criticisms were concerned with how straightforward was the preoccupation of planners with economic growth [121]. At the same time, the participation of educational planning to promote changes in the educational systems and, by correlation, in the socio-economic framing of these countries, served to support governmental demands for more profitable external aid [122].

3.2.2-External aid

The purpose of this subsection is to offer an analysis of the role of external aid in Brazil and Colombia. Although it has been already mentioned in previous sections, the intention here is to look specifically at one of the mechanisms which acted upon the change of educational structures in those countries.

This subsection argues, following the previous chapters, that one aspect that involves dependent societies is the necessity of foreign support for their development.

It will be argued here, expanding argument (iv), that without external aid, at that specific period, under the pursuance of a specific model of dependent development, there was no possibility for changing education and implementing programmes such as vocational education related INEM and PREMEM projects. On the other hand, the
international financial and technical apparatus, which provided this support, had a lot to do with and to say about the internal policies which were designed to achieve the government development goals.

The massive foreign aid, which flowed to Brazil and Colombia, mainly during the sixties and seventies, was a consequence of the action of various international organizations. To achieve the goals proposed by the recommendations of international conferences, most of the projects needed financial support. Therefore, external aid was a result of the policies proposed by the agencies, as well as technical assistance.

Thus the evolution of external aid in Colombia and in Brazil was part of international financial and technical assistance policy. Foreign aid has large ramifications and was not an isolated phenomenon.

The influence of external agencies in Brazil and Colombia has been a remarkable feature of educational policy-making in the two countries. In Colombia their role was made effective and explicit, when the government opted for international assistance to modernise the country, especially after the National Front came into power in the late fifties. UNESCO was the first agency to be involved and to provide experts in fields such as agricultural education, education planning, elementary-teacher training
and secondary school re-organization in Colombia as in Brazil [123].

The attitudes towards this assistance varied in each case. As was earlier noted in chapter 2. Colombian appeals for external aid, to carry out its policies on education and economic planning was a government choice, with the idea of attracting foreign capital to national development. The country needed that, to pursue industrialization and also to find external recognition in the international forum [124]. As a consequence, a range of missions, reports and co-operative programmes brought loans into Colombia, which was quoted as a good example of international aid policies [125].

UNESCO's missions in Colombia received financial support from different international organizations such as other agencies, as well as from private foundations, like the Ford Foundation. These programmes were first aimed at helping agricultural and industrial education and also at the improvement of science and technology education [126].

Between 1965 and 1975 external aid was directed towards the preparation of specialists and those who were expected to lead the process of changing educational structures: the planners and administrators. For that purpose, courses and scholarships were provided for the training of personnel in the various technical aspects of education management. These programmes expressed a shift from the expansion programmes
of the former decade to a more "functional" approach, now oriented to the strict necessities of economic development.

To allow aid programmes to act more effectively, the various international agencies joined forces. The first example of this combined effort was in Colombia, once more a pioneer for other Latin American countries. In that country a joint resident UNESCO/IRDB/AID planning mission was established in 1963 to assist the Ministry of Education in the elaboration of the national education plan in order to prepare the projects submitted for external aid [127].

The control of Colombian education policies by foreigners was well underway by then. The mission's explicit objective was to inform the donor agencies about Colombian educational problems. Moreover, the participants in the agencies' pool in Colombia expected that the experience could be extended to other countries [128].

In Brazil the concerted approach to development with the help from outside as in Colombia, only occurred after the 1964 military coup. Before that, international financial aid was addressed mainly to economic projects and less to educational ones. The perspective on external aid and advice changed completely with the first military government.

Like the Colombian authorities, President Castelo Branco used North American help to reforms, which, in his view, would bring development to the country. In this instance, USAID was joined by the Interamerican Development
Bank and the World Bank's financial assistance [129]. This came in the form of loans and was part of the great effort to restructure Brazilian institutions and administration for this new stage of modernization.

An in depth and comprehensive analysis and history of foreign aid to education in Brazil is still missing in the literature so that is not possible to study the responses Brazil gave to it in a systematized way. However, it has been noted that the pervasive role of the United States was influential in most of the important changes or innovations processed such as: technical and agricultural education, primary curriculum and teacher training programmes, and finally secondary vocational education [130].

However, there have been criticisms. External aid procedures in Latin America, in connection with educational planning, were the subject of a report of the five-week Seminar on Educational Planning in 1964, promoted by UNESCO in the IIEP's headquarters. [131]. It became clear by then that there were several dissatisfactions voiced by Latin Americans about the modus operandi of the donors.

These criticisms demonstrated a number of problems imposed by aid on the recipient countries and the existence of a number of disagreements between donors and recipients. There was excessive interference by foreign experts, a lack of confidence in the locals, and consequently, few people from Latin America were employed by the programmes. In
from Latin America were employed by the programmes. In addition, there was an excess of control which did not avoid the overlapping actions of the different agencies acting in the same project.

The most serious criticism consisted in the existence of plans and projects which were elaborated a function of external aid [132]. These plans were elaborated as a function of external credits or assistance, and diverted educational planning away of national interests.

The importance of aid strategy, it was stated by then, was beyond educational objectives. The IIEP recognized this, when in the final report of the Seminar it was declared that: "Some institutions have economic objectives, others have educational objectives, many have different political objectives" [133].

Overall, this subsection has analysed the political role of external aid to educational policies in Brazil and Colombia. The examination of the patterns of aid pointed out by the previous section, demonstrated that in both Brazil and Colombia aid was meant to change education and other structures, being part of a major restructuring in both countries. The greater amount of aid also coincided with the countries undergoing a new kind of economic development, under specific political regimes, which demanded external support.
The next subsection will specify one particular aspect of educational policies which can illustrate how international influence has surrounded vocational education.

3.3 - The foreign genesis of vocational education

This subsection argues that the promotion of vocational education was one of the policies addressed to modernization and social integration in countries such as Brazil and Colombia.

It will be argued that the rhetoric about vocational education involves two different perspectives: (a) it was a necessity to provide the whole work force with the skills demanded by a society undergoing rapid industrialization; (b) it became a tool to improve the chances of employment for the masses going to secondary education in the late sixties.

The interpretation for these two justifications suggests that the first was more related to the early developmental goals and the second reflected the great concern with youth unemployment after the increase in primary and secondary education enrollments. Both rationales were found in the genesis of vocational education policies brought to the region from abroad.
To stress the concern of the international agencies and other foreign organizations with vocational education, this subsection outlines some of the ideas and discourse which aimed at the introduction of this educational trend into Latin American countries. This trend was disseminated through international meetings where the idea was seen as a good solution for a variety of problems in Latin American countries.

UNESCO gave a great incentive to the spread of the idea of vocational education. The UNESCO General Conference in 1962 stated:

Technical and vocational education should be an integral part of an overall system of education and as such, due consideration should be given to its cultural content. It should do more than train an individual for a given occupation, by providing the persons concerned with the necessary skills and theoretical knowledge. It should also in conjunction with general education, provide for development of personality and character and foster the capacity of understanding, judgement, self expression and adaptation to varying environments. To this end, the cultural content of technical and vocational education should be set at such a level that the inevitable specialisation in technical and vocational education does not stifle broader interest [134].
This recommendation was followed by other similar themes in all the events sponsored or coordinated by the United Nations at that time. Like UNESCO, the International Labour Organization in its forty-sixth session in Geneva, in June 1962, approved special recommendations for the subject [135].

By this time, the United Nations was committed to the problems of economic development and many surveys on the economic and social aspects were ordered to identify needs and to evaluate the provision of education in member states [136]. Based on such reports, suggestions for the adoption of vocational education were found in most of the recommendations from the international agencies' sponsored meetings, in addition to other bilateral and regional meetings.

The doctrine on vocational education of the international agencies had its origin in both UNESCO and ILO organizations. At UNESCO, it evolved from a concept of education as having an end in itself to the concept of an instrument of social change.

In the sixties, however, under the influence of ILO, vocational education was given the connotation of a preparation for "human resources for development". Originally, vocational education had been a matter of ILO policies in terms of the labour structure [137].
UNESCO first considered education a process which begins and ends in itself, but it slowly moved towards the idea of education as a social instrument. By 1962 UNESCO and ILO assembled a similar point of view about the need of technical and vocational education. ILO stated vocational elements should be part of formal education, as a means of preparing individuals for a useful adult life, and for the first time, UNESCO endorsed the recommendations stressing the need for vocational education [138].

This motion was observed later at the Regional Conference on Education and Economic and Social Development in Santiago in Chile. It was there for the first time in Latin America that the economic rationale prevailed and the manpower approach was applied to educational planning. The Santiago "Conference of Ministers of Education and Those Responsible for Economic Planning", which was held in parallel to UNESCO's meeting, issued recommendations on technical and vocational education linking it unequivocally to the "national policy of economic and social development" [139].

This preoccupation to change priorities on education in Latin America was pursued elsewhere in the mid sixties, such as at the Williamsburg Conference called by President Lyndon Johnson of the United States [140]. An account of the Latin American countries was given by Betancur-Mejía, and once
again, he stressed the new trend offered by the economists in more than one document or meeting:

*It is necessary to undertake with full consciousness the training of leaders through special education designed to promote the process of change. This implies that especially intense treatment should be given to secondary and higher education [14].*

Thus the need to change secondary and higher education systems was based on an economic rather than a pedagogical rationale. Since the mid-sixties the rhetoric of the documents issued at international conferences was explicitly in favour of the expansion of vocational education. By that time, education was drawing high expectations from those responsible for economic development policies. Such a tendency was confirmed by the joint national and international efforts to make education an instrument of economic and social change. An example was UNESCO's and ECLA's joint efforts to change educational structures in Latin America through recommendations which stated that

*since technical personnel are indispensable to national development, the necessary reforms be introduced to adapt the output of technical education systems to the structure of employment and to*
development requirements, in industry, agriculture and service alike.

...consideration should be given to the possibility of organising secondary education in two different cycles: an initial or common "basic" course and a diversified course offering various alternatives, selected in accordance with the economic and social development requirements of the country concerned [142].

The third UNESCO Regional Conference was not so successful and political unrest in the southern part of Latin America contributed to the limited achievements of the Buenos Aires' meeting in 1966 [143]. The general recommendations did not differ very much from the principles defended in previous ones held in Lima (1956) and in Santiago (1962).

The specialists in the late sixties began to worry about the consequences of primary education expansion achieved by most Latin American countries. That was a consequence of the external aid and assistance from foreign agencies to the governments' efforts to meet the needs created by urbanization and demographic growth in the previous decade.

However, the expansion of primary education led to a heavy increase in the demand for places in the different stages and types of secondary school. The Buenos Aires Conference took that into account and issued a
recommendation proposing studies on "problems arising from relationships between education, employment, the labour market, national development plans and the career choice of the individual" [144].

The Conference reviewed carefully the necessity of teacher-training in professional education for those countries which intended to replace the general common phase in secondary education by diversified education. At this conference there was a clear concern for the different roles of general and specialized education. An example was the recommendation that "priority should be given to technical and vocational education in national education policies" [145], which could be considered as an precedent for the secondary school reforms of the following decade.

In 1971 the focus on economic development was still present at Venezuela's Conference, the first to invite "those responsible for the promotion of science and technology" to participate. Among the general issues were the suggestions for the reform of "excessively rigid educational structures and the diversification of the different phases and forms of education" [146]. These measures were advocated in the name of the democratization of education which, the Conference pointed out as necessary to equalize opportunities and to extend the possibility of the successful completion of schooling. In respect of secondary schooling the recommendations pointed in the
direction of an increase in the number of branches and specializations, to introduce work-experience activities, and to create secondary schools in the rural areas [147].

The bulk of educational reforms which took place, in Latin America during the seventies, were undeniably influenced by all these Conference's recommendations.

Analysing those reforms Blat Gimeno argues that "the nature and basic objectives of this movement are rooted in a concern to democratize education and to improve its quality" [148]. On the other hand, there was enough evidence throughout the reports, surveys and recommendations, from external sources, that the reforms on education were necessary "to relate education more closely to economic and social development" [149].

This chapter analysed the various channels which brought foreign influences affecting educational policies in Latin American countries, in particular Brazil and Colombia. These influences were put forward though various mechanisms: (a) through unilateral aid as the sponsored by the United States and discussed in the previous sections; (b) through multilateral organizations such as the various international agencies headed by UNESCO; (c) through recommendations
issued by regional and international conferences attended equally by local policy-makers and international advisors. Overall it is suggested that foreign influences which were analysed in this chapter stressed the changing of educational systems to adapt them to the needs of economic development. An example is the early involvement of the United States on the programmes to introduce vocational and technical education during the phase of "import substitution" in Brazil and Colombia.

The ideas about how education should be changed in Brazil and Colombia were supported and appeared as a consequence of the insertion of these countries in what is characterized here as "dependent development". The foreign assistance to educational reform in both countries followed industrialization, backed by the rationale that education would help the development in these countries.

Therefore education reforms, such as vocational education were part of a major strategy: the achievement of economic development, specifically dependent development, after the integration of the Latin America into the international capitalist market.

As a consequence, of these broad international circumstances, the United States had provided cultural and educational programmes, as mechanisms to confirm the alliances between that nation and Latin American countries. Such was the origin of numerous of agreements and bilateral
programmes that were put forward in the early sixties, in Brazil and Colombia with the interference of the United States. Industrial and agricultural training were specially targeted by these programmes.

This strategy was pursued with the collaboration of an international apparatus, which was created after World War II to enable nations to achieve economic development. This kind of collaboration was more visible during the sixties, with major programmes sponsored by UNESCO and after that the large range of other programmes sponsored by regional and international organizations, with the same objective: to modernize education.

These multilateral organizations sponsored a new set of policies suggested to Latin American countries. There was some overlapping of the agencies' activities in Brazil and Colombia. In the sixties the more influential were UNESCO and USAID. After 1970, the World Bank took charge of most of programmes and reforms, financing as well as giving technical advice.

Basically, those agencies and other non-governmental organizations committed themselves to apply modernization theory to induce economic development in the region. This rationale framed all the educational reforms introduced through foreign aid in the fifties, sixties and seventies. The agencies' rationale was transmitted through the justifications given for the policies based on economic and
social planning methodologies which informed educational
and other socio-economic reforms in the two countries.

Vocational education and the reform of secondary
education were prescribed then as instruments to achieve
social and economic progress. In dependent developed
societies, vocational education would serve the double
purpose of preparing the work-force needed for a modern
economy, and also satisfy demands for education by opening
up vocational schools.

NOTES AND REFERENCES

1. See Otávio Ianni, Imperialismo e Cultura [Imperialism and

2. Octavio Ianni, op. cit. p.14; Jan K. Black, United States
penetration of Brazil, University of Pennsylvania Press,
1977, p 8.; William Y. Elliot, "The Road to Self-Help", in
William Y. Elliot, (ed.) Education and Training in
Developing Countries: The Role of U.S. Foreign Aid, New
York: Frederic Praeger Publishers, 1965, pp.3-17. See also
Octavio Ianni, Imperialismo y Cultura de la Violencia en
América Latina [Imperialism and the Culture of Violence in

3. See Octavio Ianni, op. cit. p 22-24. This author discusses the relationship between the economic, political and cultural structures of dependency. He shows how the economic structures are not alone in the determination of dependence.


5. Ibid., p. 40


10. Ibid., pp.46-47.

11. This can be deduced from the policies that were settled during this period. An account of the U.S.international programmes is provided by John E. Slater, "International Educational and Cultural Policies and Programs for the 1960s: Philosophy, Objectives and Illustrative Programs", *in* W. Y. Elliot, op. cit., pp.335-399. This author was then the Deputy Assistant Secretary of State for Cultural Affairs.

14. See Adriana Puiggrós, op. cit. p.87-89. The following organizations have played an essential role in the spread of modernization policies in Latin America: Organization of American States (OAS), Interamerican Economic and social Council (IES), Interamerican Development Bank (IDB), Latin American Association for Free Trade, International Monetary Fund, IMF, International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), Economic Commission for Latin America (ECLA). Other organizations from outside the continent such as OECD also gave their support to develop programmes under the general surveillance of the U. S. Agency of International Development (AID).

15. See John Slater, op. cit., p.335.


17. Black, op. cit. p 10. This author observed: The goals ostensibly embodied in the Alliance for Progress represented the boldest undertaking by the United States in the History of inter-American relations.

18. The functions of AID were recognized to be of extreme significance in the history of USA-Latin América relations. See, Octavio Ianni, op. cit. p. 90; Adriana Puiggrós, op. cit. p.125.


22. The description of these cultural programmes is in Ianni, op. cit., p.39.


25. Ibid., pp.92-93.

26. Ibid., p.189.

27. Ibid., pp.144-145.

28. Ibid., p.145.

29. Ibid , p.129.

30. Octávio Ianni, op. cit. p.48

31. Ibid., p.55.

32. Ibid., p.50.

33. Ibid., p.55.

34. See Adriana Puiggrós, op. cit. p.141.


37. Ibid., p. 136.

38. Ibid., p. 133.

39. Ibid., p. 137.


41. The purposes of U.S. aid policies were stated in the United States of America General Accounting Office. *U.S. Foreign Aid to Education. Does Brazil need it?*, Washington D.C., 1973, Report to Congress by the Controller General of the United States, p. 8; Jan Black talking about the participation of the local Brazilian businessmen in helping the United States action within this country observed: "A recent study of multinational corporations by Louis Turner concluded that such corporations create, in the so-called underdeveloped countries, local elites whose tastes and standards of living are imitative of the status system of more highly industrialized countries and whose attention is distracted from the interests of their own people. James R. Kurth saw this co-optation leading to a new sort of
'international', with its own ideology, centered in post-industrial America, but including businessmen, managers, and technocrats from all industrial nations". See Jan Black, op. cit., p. 80; See also Adriana Puiggrós, op. cit., p. 144.

43. See José Nilo Tavares, "Educação e Imperialismo no Brasil" (Education and Imperialism in Brazil), in Educação e Sociedade (Education and Society), São Paulo: Cortez Editora, n. 7, Sept. 1980 pp. 6-52., p. 6.

44. Ibid. p. 47.


47. See J. N. Tavares, op. cit., p. 16.

48. Ibid., p. 21.

49. See Puiggrós, op. cit., p. 124-125.

50. See J. N. Tavares, op. cit., p. 25.


52. Ibid., p. 26.


54. Ibid. p. 9.

55. Ibid. p. 9.

56. Ibid. p. 10
57. Ibid. p.17.

58. See chapter one, which discusses this theory.

59. See Jan Black, op.cit., p.80.


65. Ibid.

66. Ibid.

67. Ibid.

68. Ibid.

69. Ibid.

70. Ibid.

71. See Clarice Nunes, op. cit. p.149-150. See also Jorge G. de A. Silva, *Educação e Hegemonia: um estudo sobre os papéis desempenhados pela EPEM e pelo PREMEM a partir da década de 60*, [Education and Hegemony: a study on the role played by EPEM and PREMEM from the 1960s], Tese de Mestrado apresentada à Faculdade de Educação da UFRJ, [MA thesis presented to the Faculty of Education in the University of Rio de Janeiro], Rio de Janeiro, 1984.

72. Through chapter four, this thesis will compare in detail the similarities and differences between the two programmes.

73. See J. de O. Arapiraca, op. cit., p.112.

74. Ibid., p.115.

75. Ibid., p.115.


79. Ibid., p.174.

80. Aline Helg, op. cit. p.257, discusses what she termed the "Colombian cultural and pedagogical dependence".

81. Ibid., p. 257.

82 Ibid., p. 195.

83. See Richard Renner, op. cit., p. 176

84. See Aline Helg, op. cit., pp.195-196 for an account of the creation of ICETEX. This institution's first aim was to
provide financial assistance to university students training abroad. Educational exchange programmes were developed first through the State of Florida and later through various university consortia in the United States.

85. See Fernando Cepeda Ulloa, op. cit. p. 205.


87. There was some overlapping and clashes between two agencies acting in the same field, as was reported by AID in the document released from the U.S. General Accounting Office, (see 86).

88. See T. P. Schultz, Returns to education in Bogota, Colombia, Santa Monica, Cal.: AID, Rand Corporation, 1968.

89. Ibid., p. 33.

90. Ibid., p. 39.

91. Ibid., p. 39.

92. Ibid., p. 39.

93. See R. Renner, op. cit., p 181. Renner provides a list of those sources of financial and technical assistance to education in which most of the resources have been granted directly to universities. Of the total amount of 48,049,648 million U.S. dollars provided by various agencies between
1960-67, 28,022,545 million was destined to universities.
This author also states that much of the assistance provided
with U.S. funds has been available under contract with U.S.
universities.

94. Ibid., p. 181.
95. Ibid., p. 181.
96. Ibid., p. 181.
97. Ibid., p. 183
p. 20.
99. Ibid. p. 20.

100. See ILO, International Labour Office, *Towards Full
Employment: a Programme for Colombia organized by the
International Labour Office*, Geneva: International Labour
Office, 1970. See also World Bank, *Report of the Committee

101. Fernando Cepeda Ulloa in his article about the effects
of aid to Colombian education, commenting that a great number
of U.S. professionals have been given the chance for
employment at those aid programmes, pointed this out as one
of the benefits from aid to the donor country. See Fernando
Ulloa, op. cit., p. 202. On the other hand, the presence of
Latin American advisors in international organizations is
commented by Aline Helg. See Helg, op. cit., p. 201.

103. United Nations organizations which have been dealing with social and economic policies in Latin America: International Reconstruction and Development Bank, IRDB; Food and Agriculture Organization, FAO; International Labour Organization, ILO; Economic Commission for Latin America, ECLA; all of them sent representatives to the IIEP Seminar on "Problems and strategies of educational planning" held in Paris in April/May 1964.

104. See the report from AID, op. cit. Anexes.


110. Ibid. p 147.


112. See P. Coombs in Unesco/IIEP, op. cit. p. 6.


114. José A. Mayobre, "The economic Background to Educational Planning" in Unesco/IIEP, op. cit. p.17.


116. A. Moncada states: "Latin America became a laboratory for the western designed development plans experimentation". See A. Moncada, op. cit. p.91.

117. See Unesco/IIEP op. cit.: List of Participants in the "Seminar on Problems and Strategies of Educational Planning" UNESCO, Paris April-May 1965-


120. See Adriana Puiggrós, op. cit., pp. 140-141.

121. See A. Moncada, op. cit. p. 91-92.

122. See Diez-Hochleitner in Unesco/IIEP op. cit. p 45.

123. Ibid., p. 46; see also Moncada, op. cit. pp. 100-1.


125. Ibid. p. 200.


127. See Richard Renner, op. cit.

128. Ibid.


130. See AID report.


132. Ibid.
133. Unesco/IIEP presentation of the International Institute for Educational Planning. (internal cover).

134. See José Blat Gimeno, op. cit. p. 29.


135. Ibid.

136. Ibid.

137. Ibid.

138. Ibid.

139. Ibid.


140. Ibid., op. cit. p. 266.

141. Ibid. op. cit. p. 266.


143. José Blat Gimeno, op. cit. p. 30

144. Ibid., p. 30.

145. Ibid., p. 30.
146. Ibid., p. 31.

147. Ibid., p. 31.

148. Ibid., p. 55.

149. Gabriel Betancur-Mejía made this statement about the role of education: "Education should be adjusted to the requirements of economic and social development in due proportion to the quantity and quality of human resources with special emphasis on new social usages and attitudes."

See Bereday, op. cit. p. 275.
CHAPTER 4

THE INTERNAL INFLUENCES ON VOCATIONAL EDUCATION: THE ROLE OF THE STATE AND THE ELITES IN BRAZIL AND COLOMBIA

Following the previous chapter's analysis of the external influences on vocational education policies adopted by Brazil and Colombia, chapter four will look at the local influences upon the same policies.

The purpose of the chapter is to answer questions such as: what was the role of particular socio-political conditions in influencing the conceptualization, aims and structures of vocational education? How may these socio-historical conditions be related to the dependent development context of the two societies? What has been the filtering effect of the state and of particular elites on a variety of foreign influences?

This chapter will argue that, in dependent societies like Brazil and Colombia, external influences on education were filtered by the internal role of various elites and the nature of the State.

The chapter will pursue its line of argument through cumulative levels of complexity. First, to explain the intricate web of the internal influences and the local context in dependent societies undergoing development, the
analysis will start from an historical account of the
development of vocational education in both Colombia and
Brazil with an emphasis on economic influences on the
educational reforms in the two societies. Second, this
analysis will be pulled together in a comparative section.
Then, thirdly, this initial interpretation will reassessed
against the theme of internal influences, within the
political and ideological framework of vocational education
reforms.

Specifically this chapter will argue

i) that the vocational education reforms of both
countries were internally linked to the pursuance of
economic development so these reforms were based on an
economic rationale;

ii) that the internal socio-economic conditions,
represented by the different degree of participation of the
different social classes in the benefits of development,
framed the the adoption of such policies.

iii) that during the sixties and the seventies, the
restructuring of national policies on education (among
other financial and administrative measures) was part of a
network of policies designed by various elites and the
state to fit the context of dependent development.

iv) that the vocational education reforms in both
countries were underpinned by clear political and
ideological aims, in spite of the pedagogical rhetoric used to justify these policies.

To pursue these arguments, this chapter will be subdivided in three main sections. The first section, "Vocational Education Reforms in Brazil and Colombia" will define the genesis of vocational education. It will analyse the introduction of vocational education into the secondary education system in each country, with an emphasis on defining how these policies were conceived and what were the aims and structures of the vocational programmes in each country. Then, a second section will compare the planning, aims and structures, and the institutional aspects of the reforms, to identify the pattern of internal constraints in Brazil and Colombia. A third section will offer a comparison between the vocational education institutionalization in Brazil and Colombia.

The first section, "Vocational Education in Brazil and Colombia", looks at an analysis of the implementation of vocational education policies as a complex process, which took place more or less at the same time in the two countries, under external and internal pressures. It will look also at the actions taken by the State in Brazil and Colombia to promote educational advance; how these actions emerged and progressed up to the recent creation of vocational education as a wider type of schooling.
The second section, "Vocational education reforms: a comparison between Brazil and Colombia" will compare the main elements which affected the vocational education policies in Brazil and Colombia when these two countries were both adopting national economic plans to improve modernization.

The third section "The context of educational reform" will emphasise and examine the political and ideological context which framed the vocational education reforms. The main objective of this section will be to analyse the role of the state and particular elites as the two main internal forces which filtered foreign ideas and which tried to adapt international models to fit local interests.

4.1. Vocational Education Reform in Brazil

The purpose of this subsection is to analyse the introduction of vocational education reforms in Brazil during the years of the military government, i.e. 1964-1980s. This period is characterized by the power of technocrats who, when in charge of economic and development planning, adopted the military ideology of "development with security".

This section argues generally that in the educational field the reforms of all levels of education, but
particularly higher and secondary education, followed that technocratic rationale.

Throughout this section and its subsections it will be argued that during this period in Brazil educational reforms, including reforms of vocational education, had three purposes: a) to provide a more efficient and modern system of higher education for the various elites; b) to expand access to education for the lower strata within a more practical type of preparation for work; c) to provide the authoritarian government with an instrument to smooth the criticisms inside and outside the country. Thus education had a double aim: to improve socio-economic conditions of certain sectors and to transmit the values and beliefs of the development model adopted.

4.1.1. The pre-conditions for educational reform

What was the general political framing of vocational education policies in Brazil? What were the main structures and policies of the military government, which preceded the reform of vocational education together the reform of the whole education system?

After the military resumed the country's administration in 1964, the educational problems and their solutions, became a task for economists and technocrats
more familiar with planning perspectives than educationists. However, Brazilian educational policies, under the military regime, suffered a process of discontinuity affecting the innovations which were needed by a rapid changing society.

After the establishment of military government there was a break with the progressive tendencies of the past [1]. A reform of the entire administration was brought about through Decree No. 200. The principal role of decision making in public policy was assigned to a new body: the Secretariat of Planning [2]. Directly linked to the Presidency, this planning office was to have a strong influence on the determination of social and economic policies. The section of the secretariat concerned with carrying out studies and preparing projects, IPEA, became deeply involved in preparing plans for education [3].

Within the Ministry of Education, power was then given to technocrats who complied with the expectations of the new rulers [4]. The highest administrative and advisory body in educational matters, the Federal Council of Education, had its powers enlarged with the addition of new members loyal to the government [5].

Educational problems and their solutions became a task for economists and technocrats more familiar with planning perspectives than educationalists. Politicians and professional educationalists, who had led the discussion of
these matters before 1964, were dismissed and replaced by others more sympathetic to the technocratic approach [6].

It will be recollected that development ideas had been underway already for almost a decade with the idea of national development deeply rooted in the Brazilian intelligentsia, when the military emerged as the new rulers. Then, the nationalist character of development was replaced by the idea of "interdependence" and a new rationale was developed to justify a close relationship with international sources of capital to respond to the interests of "economic development "[7]. This rationale had the additional support of the doctrine known as the "National Security Doctrine", developed within ESG, the Escola Superior de Guerra, the army staff college [8]. The motto adopted by the Brazilian government was "development with security". This justification put into relief the new character of the development: the integration with international capital, paralleled by a strict internal order, to allow the consequent establishment of economic priorities such as maintaining low inflation and accelerating external investments [9].

4.1.2. Education reform in a context of rapid economic expansion
The purpose of this section is to show how, during the successive military governments, educational policies were designed to achieve the proposed: "development with security".

With financial and tax reform in mind, the first military government of Marechal Castello Branco did not start any educational reform programmes. There were proposals for reform in many fields, which were outlined by a group of entrepreneurs inside IPES, Instituto de Pesquisas e Estudos Sociais (Institute for Research and Social Studies) [10]. These studies and drafts for a number of reforms, desirable from an entrepreneurial point of view, provided a useful asset for the new government. The Minister for Planning, Roberto Campos, collaborated with IPES and it is possible to find a direct relationship between IPES proposals and the policies of the Castello Branco government [11]. During his term of office, Castello Branco relied on foreign assistance in designing his reforms, as the government established closer ties with the United States [12]. In the educational field this would be demonstrated in the signing of agreements with USAID in 1967 (as was described in chapter 3).

During the first post-1964 government, the main objective of education, from the planners' point of view, was economic in nature: the workforce must be prepared for the economic development in progress [13]. This included
the preparation of semi-skilled labourers, technicians and highly skilled workers.

Education planners were working to the theories of modernization and were also assisted by studies provided by various internal and external agencies. Internally these studies were produced by INEP Instituto Nacional de Estudos Pedagógicos (National Educational Research Institute) and other private organizations such as IPES, the entrepreneurial pressure group. Externally, planners relied on studies provided by international agencies and co-operative organizations [14]. Policies were designed mostly with a view to the demands of urban strata for more middle level and higher level education.

In these studies, there was a criticism of the lack of "practical" secondary education. The stress, however, was still put on increasing the number of enrollments in higher education. Greater numbers of elementary schools were also considered a political target since education was seen as a means of creating "favourable attitudes" towards government projects [15].

Although these propositions were mostly superficial, they do show some intention on the part of the first military government to tackle educational reform. Broadly speaking, the first military government's educational plan followed the recommendations of international conferences [16].
During the second military government, economic policy changed its course. From an anti-inflationary model, it moved towards improving the industrial sector. Educational policy then had a dual purpose: besides preparing the workforce, it would have to help the development of an internal market and to reduce disparities of income. Such were the pivotal ideas in the Programa Estratégico de Governo (Strategic Government Plan) [17].

This Programme was formulated by IPEA/MINIPLAN officers along with officers of MEC [Ministry of Education] in relation to education. There was then a shift in the ideas supporting the role of the Ministry of Planning, which had its name changed to the Ministry of Planning and General Coordination. In practice, this meant total control of the formulation of the national and sectorial plans by that institution. As a consequence, all the sectors were affected by MINIPLAN guidance.

Thereafter education was clearly envisaged as an instrument for furthering "national development". Moreover, it was believed by planners that vocationalization of middle level education would release capital for private enterprise, while preparing the workforce at school [18].

In this 1968 plan, some of the future policies were already sketched: the reform of middle and higher education, the creation of a special fund for education and MEC's administrative reform. The planners believed that the
reformulation of the educational system would bring an integrated system for the preparation of the work force. The process was to begin with a **Sondagem de aptidões** (sounding out of aptitudes) at elementary level, and was to be followed by specific vocational instruction at secondary level and with short courses for undergraduate, masters and doctorate students in higher education [19].

For the implementation of these policies, the government relied on external and internal resources of money such as the USAID agreements and the recently established FNDE *Fundo Nacional de Educação* [National Fund of Education] [20]. However, the resources were not available to the extent which was needed to fund the educational system, which continued to receive much less money than other basic sectors such as energy and transport [21].

As has been suggested by previous arguments, the new target implied an acceleration in the modernization of Brazilian society through the improvement of educational conditions. The government was expected to expand the number of consumers and also, following human capital theory, to improve the earnings of the workers. That was implicit in the goal of "reducing illiteracy rates in the interest of increasing employment among the labour force in order to expand the internal market" stated by the Second National Development Plan [22]
During the second term of military rule, the higher education reform of 1968 was carried out following the recommendations of the government's agreement with the United States [23]. It was thought by the planners that the effort to modernize the economy demanded higher qualified people to supply the needs of industries and business. In line with this rationale, the Brazilian government took into consideration suggestions made by foreign experts on how to make universities more productive.

The third government after 1964 ushered in the greatest period of change in the Brazilian educational system in recent years. General Emilio Medici's term in office coincided with the peak years of the "economic miracle". The GNP reached its highest level for many years. The other side of this achievement was the repression of dissent by the military dictatorship and the co-option of the affluent middle classes [24]. The government transition plan, Metas e Bases para a Ação do Governo (Goals and Bases for the Governmental Action) stated the Brazilian government's new target: "preparation for entry into the club of "developed world" nations by the end of the century" [25]. That was the rationale behind the introduction of "structural reforms" which would provide the basis for an integrated development.

Thus during the military government in Brazil, educational policies were designed to provide both
workforce preparation and to permit the government target of "development with security". Those responsible for the policies were the technocratic planning officials and their policies were the first steps towards establishing vocational education as a major national policy.

Although there was a unity in the main rationale which underpinned the educational reforms, each government during the military rule pursued its own targets. During the third government, the emphasis was placed on secondary education, since the previous governments had concentrated on primary and higher education. President Medici's government, however, reinforced the triple objectives of educational policy: economic development, equalization of opportunities and national security [26]. These were also the main aims of the state and therefore they permeated all policy-making in this period. The central emphasis of educational policies between 1964 and 1980, through plans, laws or decrees had one major aim: giving a technical and productive focus to the entire educational system. Moreover, the educational reforms were assigned a political role in addition to their economic role.

4.1.3. The progress of vocationalization
This subsection will analyse the policies which allowed the expansion of the provision of vocational education in the Brazilian educational system. It will be argued that there was a close link between the introduction of vocational education and other educational reforms and the model of economic and social development that was being pursued.

The government sought to put the whole education system on the same footing as the country's economic and political model, through the combined efforts of MEC officers and MINIPLAN economists and planners. Vocational education had a double aim: to help economic development and to allow a kind of social integration of lower strata into the new socio-economic order created by what is here called dependent development.

Educational doctrine had become more refined since the technocrats and the planners of MINIPLAN (Ministry of Planning) and MEC (Ministry of Education) worked together on the educational plans [27]. This compromise allowed new targets to be set by the first PND, the National Plan for the Development. The task of educational policy was now to be that of leading the country toward social and economic development, along with fostering "a more democratic society" in the words of the government.

However, the emphasis, in the first PND, was still on making education an instrument for expanding the internal
market by integrating the marginal sectors of population into the development process [28].

Analysis of the plans and overview documents provides a vivid explanation to illustrate the government's beliefs about the role assigned to education in Brazil after 1964. The second National Development Plan, PNDII shows the role of education:

The key figure in the introduction of the policies recommended by PNDII was Minister Jarbas Passarinho, the Minister of Education, who filled the role played in the higher education reform by Minister of Planning J.P. dos Reis Velloso. It was under Passarinho that important reforms were introduced: the reform of primary and secondary education, the administrative reform of the Ministry, and other projects were carried out such as a nationwide survey of the educational system [29].

The primary and secondary school reform of 1971 was a development from the higher education reform of 1968. The original ideas for this reform had been underpinned in the educational bureaucracy and planning offices for a long time as chapter 2 has shown. As was pointed out earlier in chapters 2 and 3, secondary school diversification had already been pursued in the 1960s, influenced by external pressures and pedagogical trends. The absence, however, of any discussion or debate about the project, marked this out as the product of the dictatorship [30].
In this sense educational reforms were a product of a new approach inside the authoritarian regime. After the first two governments had dealt with economic reconstruction and expansion of a favourable attitude to what is being called here dependent development in the country, the third, and mostly the fourth government after 1964 demonstrated a persistent preoccupation with social integration, in order to give a more human face to the regime [32].

At the same time, while the last plan was apparently more advanced than the previous policies — in proclaiming new social purposes for the education system — it also made a clear choice to expand, and thereby reduce the quality of the educational system [32]. There was an economic rationale behind this decision; lowering the quality, allowed expansion within the limited resources of a "developing country". Moreover, such a decision also contained a political intention: universal access to education was a goal to be pursued, even at the sacrifice of the quality as was stated by the Minister of Education [34].

Although during General Medici's government no concessions were made, despite the "impact projects", toward greater civilian participation in government, the oil crisis of 1973, forced certain political concessions [34]. By the end of 1973, high internal inflation and the
rise in oil prices had ended the "economic miracle''. A rigid authoritarian regime could no longer be sustained and some concessions had to be made if the army were to stay in power. A new national plan, elaborated even before President Ernesto Geisel come to office, reflected the new tendencies, announcing the beginning of another period in Brazilian politics. During the last years of the military regime there was a more conciliatory approach – at least in terms of rhetoric – between liberal and technocratic elements within the government [35]. Under this new approach an attempt was made to reconcile economic development, with some amount of individual freedom. As a result of this shift there were to be changes in social policy as well as on the political scene.

In 1975 the Ministry of Education, now under Ney Braga, ex-governor of the state of Paraná, issued new guidelines for secondary education vocationalization. These alterations could be seen as an attempt to solve many of the contradictions of the Law 5692. After being acclaimed as a panacea four years earlier, vocationalization was confronted by steady opposition from various sectors of Brazilian society in the new context of political openness [36].

The Parecer 76/75 (Advisory Paper no. 76/75) released by the Federal Council for Education interpreted the vocational aspect of the Education Law 5692 as a broad
"preparation for work" rather than as "job training", as it was first termed [37]. The vocational component remained embedded in the "general formation" of pupils in contrast to what had been stated in the 1972 Advisory paper which had proposed a strict preparation for skilled jobs [38].

4.2 Vocational Education Reforms in Colombia

The purpose of this section is to analyse the vocational education policies established by Colombian governments since the period known as the "National Front" in the mid fifties until the more recent reforms in the late 1970s.

This period in Colombia was characterized by a strong political coalition which enabled the undertaking of measures leading the country to a relative prosperous period.

Throughout this section and its subsections, it will be argued that educational policies including vocational education were introduced with the following aims: i) trying to cope with the country's need for more and better secondary education; ii) trying to provide a more practical kind of secondary education for the less advantaged strata
of the urban population; iii) trying to import educational models introduced by foreign advice.

Thus this section will be subdivided in three parts: firstly it will analyse the pre-conditions of vocational education policies; secondly, the education reforms will be examined in the light of the economic expansion of the country and finally it will discuss the progress of vocationalization and its achievements.

4.2.1. The pre-conditions for educational reform

This subsection will point out the concrete conditions under which the Colombian government introduced vocational education. It will be argued that due to a permanent state of tension between the economic elites and lower strata, the Colombian government had to respond to social demands and to undertake some partial reforms. Vocational education was included in these policies to placate social unrest in the urban areas.

As has already seen in the previous chapters, the Colombian authorities had to come to terms with the policies directed towards economic development [39].

Thus reformist initiatives taken in Colombia during the period 1958-1980 were taken by both parties in office.
In other words, there were no basic differences in the government's approach to economic development among the successive alternate coalition governments. Under these circumstances, innovations were, for most of the time, dependent on the will of each minister in charge of public policies [40]. The reforms were dependent upon personal characteristics and individual efforts rather than a coherent political programme.

The so-called estrategia concesionista (the strategy of concession) was funded by taxation mechanisms, public expenditure, administrative modernization and by the creation of "privileged legislation for the poorest among the population". Such a reformist programme included the control of inflation, an expansion of employment figures, and above all, a gradual redistribution of income, in line with economic growth [41]. However, it is necessary to reconsider the economic linkage of such programmes with the relative autonomy of the State in matters dealing with economic and social policies in dependent societies [42].

In Colombia, the period of those reforms started with the first educational "five-year plan" through to the second plan issued in 1962 [43]. Colombian educational reforms from 1957 to 1963 were a result of the influence of the international missions and their expertise in shaping those policies in response to government requests. At the
same time, these reforms were conceived in closed cabinet sessions, and did not have public support [44].

As far as secondary schools are concerned, the "five year plan" proposed detailed curricular and structural changes. These began to be implemented after decree number 45 of 1962 [45]. This established a common basic cycle for all types of secondary school; they were obliged to provide a "genuine polyvalent education" and also "vocational guidance for pupils". Decree 45 was preceded by the creation of five pilot schools organized under the new diversified curriculum of 1958 [46]. Two further decrees, one in 1962 and another in 1963, completed the reform of secondary education. The central goal of the reform was to change the national secondary education system into one where pupils were encouraged to seek more practical careers or go into technical education [47].

These early efforts to implement vocational education were overridden by the demands of the local elites. The secondary school reform had the opposite effect on the social strata which had access to these schools: they sought to make the system fulfil their needs. As one researcher on Colombian education has pointed out: "The result of this demand was twofold: pressure for expansion of secondary and higher education and pressure for non-vocational non-technical education" [48].
4.2.2. Education reforms in a context of rapid economic expansion

This section is going to examine the context of those educational reforms in Colombia which had the purpose of vocationalizing secondary education in the 1970s. It is suggested that amongst a combination of internal and external factors which allowed the reforms' introduction, the main factor was the new concept of education administration.

In order to modernize schooling, from the curriculum to teaching methods and new school buildings, the Colombian education system made great efforts to rationalize and reform its administration. From the planners' point of view, a more centralized and articulated system of education was to implement new curricula. For this reason, mechanisms of control and supervision were set up by successive governments to increase the efficiency of the system.

This brought about a new orientation of the whole administration through a major "administrative reform" carried out in 1968 [51]. This reform was very important
for education, since it brought ministerial reform along with a greatly changed outlook on education issues.

After the National Front coalition took power in 1957, the Colombian government carried out three reforms at the Ministry of Education. These reforms sought to provide a modern approach to educational administration and to bring about educational policies better adapted to the co-ordination of the state [52].

The explanation for the oscillating implementation of educational policies, especially general and comprehensive reforms such as the secondary school vocationalization at national level was, in the opinion of critics of the Colombian education, the lack of a more rational administration. Historically, there have been a number of obstacles in the Colombian relationship between state and education management [53]. Decentralization has been a thread running throughout the history of the Colombian school system. Moreover, there has always been a strong private sector, led by the Catholic Church, which opposed the main reform attempts.

The National Front sought to carry through the previous governmental efforts to modernize the whole education system, and improve on them. However, the coalition government was so involved in efforts to correct
the country's internal problems, that the reforms were hampered by high inflation and the expansion of debt [54]. All major planning proposals, land reform and financial reform excepted, were shelved.

In the 1970s, Colombians saw changes in their economy along with a continuation in the political consensus, extending the dual-party coalition from twelve to sixteen years [55]. This was important for the stability of the country and obviously favoured an already existing flow of international investments.

From 1968 onwards the streamlining of the National Department of Planning became an important factor in providing a modern approach to public policy assisted by foreign experts. Foreign missions dealt with most of the problems of education related to economic development [56]. Among other things they had a strong influence over higher education, technical and vocational secondary education and more recently, rural education, teacher training and educational planning [57].

These changes, which started in the late 1960s and early 1970s were the foundation stone of Colombia's educational reform programme. The first mechanism of reform which was created had the effect of locating funds earmarked for state educational systems through a revenue
sharing programme: the Fundo Educativo Regional [Regional Educational Fund] [58]. Besides this, two other measures were taken, a budgetary law was passed in 1971, and in 1976 secondary education was nationalized [59].

Since the 1950s and the early 1960s, Colombia saw a rapid change in its occupational structure, due to industrialization and agricultural modernization. In the light of these changes, the educational system had to be adjusted to meet the needs of an expanding economy [60]. With the assistance of numerous missions from international organizations, the Colombian government tried to solve the increasing demand for expanded schooling for the population and to provide specialized workers for industry [61]. Institutions like ICETEX in 1950, SENA in 1956 and INEM in 1969, were created with the prime purpose of training young people in diverse technical and other programmes and also preparing higher graduate technicians for industry.

Legal incentives have been introduced to encourage industrial and agricultural training; new forms of secondary education have replaced the academic "bachirellato" thus aiming to make the pupil better equipped to enter the workplace.

At the same time, the first National Front governments preferred to concentrate on the improvement and expansion
of primary education, for political reasons [62]. This, along with the changing effects of urbanization, brought another demand to central government: it had to face the needs of population growth and changes in economic structure. With the growing migration of peasants to urban centres, new contingents of pupils had to be catered for and the school system was deficient. Moreover, increased numbers of pupils entering primary education would eventually place greater demands at secondary level [63]. Planners were then able to point out the inevitable need for an expansion, which had been denied and postponed a decade before.

Overall, the Colombian government, by applying those administrative measures, prepared for the future changes intended for educational system, with the adoption of a national curriculum including vocational education.

4.2.3. The progress of vocationalization

Following the line of argument stated in previous sections, this section will analyse how vocational
education in Colombia between 1966 and 1980 developed under the liberal-conservative flag of "progressive reformism".

It will be argued that the Colombian political regime, already characterized as a "reformist" but firmly held by the Colombian economic elite, used educational reforms, and vocational reforms specifically, [54] as another instrument of the "concecionista" strategy (strategy of concessions).

This section suggests that the persistent feature of secondary education reforms in the 1970s was the effort to link this level of schooling to production with the emphasis on vocational education. The first results were vocational schemes, which turned into curriculum diversification by the end of the 1970s, with the same purposes.

Among successive governments there are no deep differences to be found in the rationale underpinning educational policies. This was possible because of these policies of alternate conservative and liberal presidents were a direct effect of power sharing among the modernizing elites in Colombia. Divergences appeared mostly on institutional questions and on what particular emphasis to place on primary, secondary or higher education systems. Emphasis varied on the distribution of educational provision between rural and urban areas.
In order to establish the main internal factors involved in the evolution of educational reform, the period under scrutiny can be divided in two phases. The first phase comprises the period stretching from Llears Restrepo's government of 1966-70 to the beginning of the Lopez Michelsen government in 1974 [65]. This phase was characterized by modernizing efforts, under the banner of "social reformism". This attempt to introduce some kind of social reforms was however hampered by austerity in public expenditure programmes, to control inflation. The package of liberal-modernizing policies was to continue with liberal technicians plus conservative politicians in the next conservative term, under the young Minister of Education Luis Carlos Galán [66].

Lopez Michelsen's was the first government elected in an "open party election" following the end of the National Front. However, if his government was ostensibly representative of a realignment in the context of Colombian democracy, in reality administrative positions continued to be shared between the two major parties [67]. The second phase in the recent development of education policies which began after the extinction of the political coalition was characterized by a rather conservative tendency. However, two major vocational reforms did come into force during this period: one was the Law 080 of 1976, which extended INEM's vocational curriculum model to the rest of secondary
school sector and the other major reform was decree 088, which gave a new shape to secondary education and introduced two-year vocational studies for all pupils [68].

The law which centralized the secondary educational system was passed under a rather conservative education Minister, Hernando Durán Dussán. Although this articulate politician thought that primary education should be given priority (because of a populist stress in the first half of the Michelsen's term), the nationalization of secondary education took place with the intention to tighten up control of the system [69].

There was increasing concern inside the Ministry of Education about the inadequacy of the former legislation in providing the kind of education to fulfil new economic and social conditions. The official justification for the new education law was that:

> educational legislation has been promulgated that ignores the system as it really is... our educational laws have become a mess of uncoordinated, chaotic, and superficial norms. Education is neither organized, nor operates in a manner that will enable it to support the real needs of the education system [70]
The solution visualised by Ministry officials involved the restructuring of educational programmes and an increase in co-ordination between elementary and secondary levels. The rationale behind this change in the content of education and in the transition between the first two levels of the school system was explained in a Ministry of Education publication as a means of giving a professional aim to secondary education. The educational authority discussed this new aim in the following terms:

How can the secondary education system make a positive contribution to society, when neither graduates nor students, many of whom drop out after only two years, know enough about anything to be gainfully employed in a profession or productive work? It has become a common place to speak of the low level of achievement in our secondary schools, of the encyclopaedic curriculum burdened with theory and without practical applications, of the lack of professional guidance, of bookish teaching that has no relevance to national problems and of the graduation of secondary school students whose diploma is of no use to them and does not even allow them to continue studying.

It was with such a criticism of the role of secondary education in mind, that the 1976 Education law was implemented, reorganizing the Ministry of Education and
restricting the educational system [72]. The central aim of the 1976 reform was to consolidate vocational education and centralize control over the numerous uncoordinated vocational programmes that had been established over the years. For this reason, the 1976 law also transferred control over the instruction programmes of the Institutos Nacionales de Enseñanza Medio, INEM and the five Agricultural Technical Institutes, the ITAs, to the Ministry of Education [73].

Pedagogical innovations constituted the other part of these legal measures. The 1976 reform was also aimed at establishing a transition between primary and secondary school, besides creating closer links between schooling and preparation for the workplace [74].

In addition to the criticisms about the lack of co-ordination between primary and secondary schools, there was a common feeling that "much of what was being taught was divorced from reality" [75]. As a solution to these problems, the elementary-level course of five years and the junior secondary-level course of four years were combined into a single nine-year "basic education" course [76]. In addition, when students had completed the secondary level, those not going on to a university could attend a new two-year "intermediate pre-professional career" programme. Through this scheme, students, who had obtained no
practical skills in high schools or elsewhere, could obtain specific training for careers in particular fields supposedly undergoing rapid expansion [77].

Although the expansion mentioned is more related to the tertiary rather than the industrial sector, the move towards a new curriculum had become a definite trend, as Mark Hanson testifies:

> Along with the creation of a nine-year basic education programme and an intermediate pre-professional career programme, an effort was begun to increase the diversity of educational programmes. Similar attempts were being made throughout Latin America in the 1970s [78].

In order to put the new programme into practice, the Colombian educational authorities relied on previous experience with a multipurpose curriculum from the INEM secondary schools. The nineteen comprehensive secondary schools (which in 1977 comprised only 6.34% of the total number of secondary schools, according to Hanson), would provide the model for the Ministry's attempt to diversify the programme for the last two years of the entire secondary level system [79].

It has been suggested by Hanson that the major changes attempted in secondary education were put forward for
A new strategy of diversification was then initiated by political purposes rather than practical considerations [78]. According to Hanson, the reform was begun by politicians with virtually no local technical assistance or advice; this would have a major effect upon the results of the reform.

The reform was established by a Presidential Decree of 1978, introducing major changes into the curriculum of grades ten and eleven. The decree, also signed by the Minister of Education, required every private and state school in the country to offer a minimum of two or three types of programme with at least one specialized subject in each [79]. Every school was given one year to prepare its diversification plan (i.e. select its programmes of study) and to submit this to the Ministry for approval. Upon approval, the school had one year to put the plan into operation. Private schools were permitted to combine their programmes; students could attend one school for basic courses and another for specialized ones.

Another vocational education policy was adopted during the government of President Turbay Ayala. The new project called for the creation of 23 satellite centres of vocational instruction, the so called Centros Auxiliares de Servicios Docentes (Auxiliary Centres of Teaching Services), CASD. This new policy attempted to integrate
secondary school academic programmes with specialized courses offered at the satellite training centres [80].

Considered "conciliatory" on the question of relations between government and education, Turbay Ayala brought a liberal emphasis to the period. On the economic front he abandoned all populist and protectionist policies and took a pragmatic view of wealth redistribution which affected educational policies [81]. After a period of relatively progressive reforms, however, Ayala, faced with a lack of any substantive achievement, was forced to fall back on improving the efficiency and effectiveness of existing resources.

During the period reviewed in this section the Colombian policy-makers put forward legal measures intending to link education to production through a series of major educational reforms. However, those efforts only partially affected the aims and structures of the national system of education. The educational as well as other policies were dependent upon extra-governmental factors stemming from the socio-economic context in which they were formulated. The governments one after other sought to extend the purposes of secondary education through different kinds of reforms based on the previous experience of INEM schools, but the Colombian context had changed by then and without support and resources from external
sources and with many internal economic difficulties, these reforms became frustrated attempts.

4.3 Vocational Education Reforms: a comparison between Brazil and Colombia

This chapter up to now has offered an overview of vocational education structures and the process of their implementation in Brazil and Colombia. It will offer now a comparison of the processes of adoption and implementation of vocational education reforms in the two countries.

In order to compare the elements which involved vocational education policies in the two countries this section will compare the main general characteristics of these reforms into four subsections: 4.3.1. Policy guidance 4.3.2. Aims, 4.3.3. Structures 4.3.4 Institutional constraints.

This section will argue that although these two countries present many differences in relation to their socio-political background, there are similar attitudes in both societies related to vocational education policies. This coincidence of attitudes can be noted in aspects such as the adoption of similar pattern of economic development, and as a consequence, the adoption of similar educational policies, specifically vocational education reforms.
This section argues that such a coincidence was possible because in both cases, a similar kind of option for dependent development in these countries produced the major initiatives on educational policies.

It is also argued that the similar educational experiences of the two countries are a complex consequence of cultural similarities, their historical development and their contemporary economic contexts.

4.3.1. Policy Guidance

The purpose of this subsection is to examine the principles which framed the introduction of vocational education reforms in Brazil and Colombia. The policies were generated under specific conditions in each case and this section will look at which were the most influential elements in the making of the educational policies.

It will be argued that substantially different political structures in both countries did not impede the respective governments from adopting similar educational policies. Vocational education was seen as a good solution to the increasing demand for secondary education both by the military in Brazil and by the civilian politicians in the Colombia coalition. From the introduction of vocational programmes in the beginning of the industrialization until
the compulsory adoption of vocational subjects at the secondary level of both systems, these policies were in accord with the targets of the major socio-economic project brought about by the dependent development of Brazil and Colombia.

The political background

Colombia has been quoted as an exception among Latin American countries, as it had democratically elected presidents over a long period in the recent past. From the formal point of view, it is a liberal democracy with presidential elections every four years and a centenary constitution.

Brazilian political history has recently been marked by a long military dictatorship (between 1964 and 1984). During this period, the constitution was altered twice so as to give legality to the military regime \[84\]. Both Colombia and Brazil have their roots in strong, traditional, social divisions, in which certain dominant groups have exclusive access to economic power. This will be the second aspect to be discussed.

The Brazilian style of "elitist democracy" \[85\] was characterized by a lack of freely organized political parties (opposition parties were suppressed, the only
remainder being a nominal opposition, without influence). There was a prohibition of strike activity, while wages were frozen. The working classes were deprived of the minimum rights they would have in a participative democratic regime [86].

The social context

However, the institutionalization of the military rule is one of the remarkable differences between the two countries (during the period in question) [87]. But, one similarity remained: namely the process of social integration through partial reforms, allowed by the government in both cases. These reforms, such as vocational education, were centralized and controlled by the state without any participation or discussion from social groups outside the government [88].

In both cases, the only exception when it came to the discussion of vocational programmes, was the participation of the entrepreneurs [89]. Although Colombian teachers were organized and strongly active in the 1970s, their movement was more concerned with wage settlements and professional conditions than in influencing educational reforms [90]. In Brazil teachers and educators were so demotivated by the political conditions, that they did not offer any kind of
opposition or attempt to influence education policies until the end of the 1970s [91].

The reformist ideas gained acceptance among the ruling elites in both countries, mainly after the 1960s, in view of the enormous differences framing the social structure. Concessions were made to the lower strata of the population in both cases, but at the same time, the working classes were not granted any share in the benefits of economic growth. In both countries the less privileged strata were, most of the time, passive observers of partial reforms, introduced by their governments to avoid social unrest.

Social advances, in Colombia, were part of populist measures carried out with the intention of gaining favour among the working classes within the traditional parties [92]. In Brazil, during the military governments, social policies were aimed at giving the authoritarian regime a democratic facade [93].

The kind of demands for educational reforms in both countries is another point to be discussed. The demand for education in countries undergoing rapid urbanization, population growth and migration was high for both countries. In both countries, however the more privileged groups, notably the middle classes, were responsible for putting more effective pressure on the state. For example, in Colombia, during the sixties, pressures from the middle and upper classes favoured the expansion of secondary and
higher education with a non-technical, non-vocational orientation [94].

In the case of Colombia one important factor to influence politicians was the pact which brought about the National Front coalition. In order to prevent further social unrest, education was given the role of civilizing the lower social strata [95]. In urban areas, the need to offer the urban masses ways of integrating into industrialized society attracted the attention of politicians and, as indicated earlier, led government to the adoption of training programmes and vocational schemes, such as SENA, the National Apprenticeship Schools and INEM, the National Institutes for Middle Education.

The role of politicians and planners

In the introduction of vocational reforms politicians and technocrats in each country played an important role. Both groups were responsible for introducing educational policies. In both countries, Brazil and Colombia, technocrats were key agents in government.

In Colombia, the technocrats acted mostly as planners, not being directly involved in the execution of the measures they planned; this was left to the politicians. This may have been due to the fact that some of the key
positions in the education planning bodies were held by foreign experts or advisors. Colombian politicians used the expertise of these planners to fulfil the projects which were financed and assisted by international organizations, as was noted in chapter 3.

In Brazil, policy-makers and planners worked closely together but there was some divergences between those who formulated and those who implemented education plans, during the period under examination [96]. Whilst traditional politicians were out of power, policies were formulated by the technocrats linked to MINIPLAN, the Ministry of Planning.

In the Ministry of Education, however, the power of the technocrats was in some ways challenged by the Federal Council of Education which had a more liberal or humanist view [97]... There was even an attempt to resist the economic emphasis which characterized the reforms elaborated under technocratic surveillance. In the end the technocrats won, and even humanists were convinced of the greater benefit of vocational education [98].

Comparing the circumstances which prepared the introduction of vocational education in Brazil and Colombia, the main common feature is the strong influence of the technocrats and the planners in the introduction of vocational education. These men were invested with great
power and responsibility by both governments and represented the educational planning school of thought.

4.3.2. The aims of vocational education policies

This subsection will deal with another aspect which is closely related to the aspect discussed above: the kind of ideas which supported the vocational education policies in both cases. It will be argued that the aims given to vocational education were linked to the national interests stated in the two countries' national development plans.

In Brazil, a steady and well defined educational project was pursued by the military between 1964 and the 1974-79 PND (National Development Plan) [99]. The same kind of educational project, although less visible than in Brazil, supported Colombian educational policies under the National Front.

The ideological justification featured by Brazil's authoritarian regime, was not necessary in Colombia; in this country the coalition known as the National Front embodied most of the ideas of economic development and social cohesion to benefit the national achievement. The main thing, in both countries, was the existence of a government doctrine; this was essential when it came to decisions like education.
The rationale of vocational education

In Brazil, the educational project was appropriated by Ministry of Education officials and by the economists and planners, in the Ministry of Planning. The heads of government relied upon technocrats who provided them with useful arguments. Roberto Campos, Reis Velloso, Mario Henrique Simonsen and Jarbas Passarinho were all technocrats who supported the ideas of "education for economic development" and stressed human capital theory when in office [100]. Throughout the years of military rule, a continuity can be found in their statements, ensuring the most important continuity: that of economic development under a capitalist model, which was based in concentration of income and tight control of wages [101].

The role of vocational education in this context was to serve developmental purposes, by providing training and also to meet the social demands brought about by the classes excluded from economic benefits of dependent development. Educational reforms during this period acted as an ideological support for the regime: the rationale was that education would provide a channel for individuals' promotion to a better social position. Therefore education, and vocational education specifically, incorporated the so-called distributivista (equalizer) function, i.e. the
functions of equalizing incomes, and giving an opportunity to students step up the social ladder.

Most of all, the rationale behind the policies created a close similarity in their respective educational reforms. In both cases all plans and official documents used the same rhetoric to justify the vocational education as the solution for various problems, such as unemployment, lack of middle level trained workers, and the traditional and archaic features of secondary school.

"Academic" education, the "divorce from reality", were part of the criticism addressed by planners to the secondary school systems in both countries. However it was not an original issue. This point had been central in reports and recommendations about education in Latin America for long time. The essential aspect, it is argued here, was the adherence of planners and politicians in Brazil and Colombia to those ideas, to justify a series of reforms. Changes in both Brazil and Colombia were justified by saying that formerly vocationalization, and recently, diversification, were the correct steps to be followed, in order to bring the secondary school system more into line with the needs of a developing country.

Economic and Political Framing
Although the first preoccupation of Colombian National Front politicians had been with primary education, the reform of the secondary level education had been present in Colombian official discourse since the 1950s, stressing the need for a kind of education which would match the world of work. This early movement towards vocational education did not typify a specific demand (at least not one expressed by the majority of the population), but a strategy conceived by planners, Ministry of Education' officers and entrepreneurs. The same stress would be brought to vocational education in the seventies in Brazil, and the government tried by various means to stress the necessity and excellence of this educational trend. And it seemed be noted that there was, indeed, in both societies, a requirement for more and better secondary education, following the expansion of primary schools in the 1960s [102].

The reformist policies of the 1960s, however, by the 1970s were replaced by a narrower technocratic approach. In order to meet the demands for more and better education, the governments in Brazil and Colombia found it easier to reform the educational system by adopting vocational curricula. The aim in both cases was to divert the pupils from a "non-productive" secondary school course and to prepare him or her to find a job, in case the student did not go to a higher level education.
The planners expected that vocational education would answer the increasing demand for more schooling from those who achieved primary education and to restrain the demand on higher levels from those already going to secondary education. With an expanding occupational force, accelerated by economic expansion and population growth, vocational education was strongly defended by the governments in Brazil and Colombia within their economic rationale and put forward, also, for political reasons.

The economic and political reasons were overwhelming in adopting vocational education policies. Very little attention was paid to the pedagogical aspects of this educational trend, in earlier studies on vocational education programmes in Brazil as well as in Colombia [103].

Only during the 1960s did secondary education reforms have some preoccupation with pedagogical matters. Then, pedagogical reasons were given for extending vocational curriculum from the lower secondary sector to all branches of the secondary school system. Such innovation was proposed in the first Colombian five year educational plan and was also discussed by Brazilian education officials in MEC [104]. However, in spite of the efforts to change the nature of secondary education in Colombia and in Brazil earlier in the fifties, there were no conditions to do that before the 1970s.
4.3.3. The institutional aspects of Vocational Education Reforms

This subsection will look at how policies of rationalizing administration and national planning, provided the basis for the reform of the national systems of education in Brazil and Colombia. This subsection argues that vocational education reforms were, in both cases, one of the structural measures which the government established to meet some of the needs of a modernized and industrialized society. It is argued that the similarity of policies adopted by Brazil and Colombia was a result of the similar strategies of development adopted in both countries.

To introduce programmes like the national reform of secondary education in Colombia and the reform of the whole educational system in Brazil, the governments had to establish major administrative restructuring. The administrative rationalization was as important to economic development as the vocational education reforms.

Administrative reforms

Studies of Colombian educational system in recent years have emphasized its increasing administrative
rationalization and centralization. This same tendency was found in the reform of the Brazilian administration after 1964, by Decree No. 200. Both Brazil and Colombia created mechanisms of centralization and rationalization to favour new policies of development [105]. As a consequence, similar institutional conditions for educational reform were found in both countries. In addition, requirements for rationalization implied that educational planning should be integrated into the goals of national planning.

In Colombia, centralization of educational policies by the Ministry of Education, was conceived as the only means of putting in order a chaotic education system. In Brazil, a similar movement occurred and was put forward as a means of achieving all "the basic structural reforms", of which one was education.

Eventually, some of the instruments within this rationalization process were established to control the finance of education. In Colombia the Fundo Educativo Regional (Regional Educational Fund), FER [106] was the body created for allocating funds to various states in order to improve the system. In Brazil the FNDE (National Fund for Education Development) had similar functions, namely to funnel central federal government resources to the states. These administrative measures were considered essential for the countries' educational reforms [107].
The administration of vocational programmes

The administrative bodies in charge of vocational education in Colombia and in Brazil shared some common characteristics at least when they were created. In Colombia, in January 1976, the Ministry of Education was restructured through the Decree 088. This reorganization tackled vocational and technical education through the establishment of specific units [108]. The División Especial de Educación Media Diversificada (Vocational Education Special Unit) took charge of INEMs, the Institutos Nacionales de Enseñanza Media Diversificada and ITAs, Institutos Técnicos Agrícolas and extinguished the former Instituto de Construcciones Escolares (Institute of School Buildings), which had been the responsible for the implementation of those programmes since they were created. The unit created by the new decree would to do the supervision and evaluation of vocational curricula extension, in all institutions providing secondary education.

In Brazil, a similar administrative restructuring occurred [109]. A first step was the creation of an independent committee functioning within MEC to put forward policies designed to vocationalize lower secondary schools. This unit was called EPEM, Equipe de Planejamento do Ensino Médio (Planning Group for Middle Education) and its main...
function was to co-ordinate the construction and equipment of the programme's schools. The EPEM committee was transformed into an unit within the Department of Middle Education, by a decree in 1968, and called thereafter PREMEM. This unit in the department would be in charge of implementing the vocational curricula in lower secondary schools before 1971. After the adoption of compulsory vocationalization of secondary schools the unit was absorbed into MEC's structure. Both administratives units, the DEEMD in Colombia, and the PREMEM in Brazil were created because of the effort to vocationalization of all secondary education in both countries. These units were originally established through external co-operative programmes and remained as integrated structures within the administration even after the implementation of the vocational programmes was completed.

4.3.4. The structures of Vocational Education Reforms

This subsection will compare the various forms vocational education structures took after implementation in Brazil and Colombia. It will be argued that the trend to vocational education was incorporated in the respective educational systems in Brazil and Colombia without major differences. It will be also argued that the lack of attempts to make these structures more carefully integrated
into local characteristics, was a result of dependent
development structures.

The vocational education structure

As was noted in chapter 2, vocationalization was
introduced step by step in both countries. There had been
pilot studies since the fifties in Colombia, as well in
Brazil, to adopt a more diversified curriculum. Pilot
schools were created in Colombia and in Brazil to test this
kind of curriculum within the formal system of education.
However, the major change only occurred in the seventies
when, in both countries, the formal structures of
vocational curricula were established.

The new schools in Brazil were established first in
five states and they were supposed to provide a model for a
new curriculum orientation in lower secondary schools
[110]. Especial buildings, specially trained teachers, well
paid with appropriate facilities, were the ingredients
which the programme counted on for success.

Further, it was expected these schools would be widely
disseminated and a similar kind of curriculum would be
adopted by other regular schools. With this programme
underway, the Brazilian government passed the law which
extended compulsory vocational training to all secondary
schools. This represented then the ultimate adoption of the pluricurricular schools system. The vocational orientation of the pupils should start at the primary level informally, becoming more structured at lower secondary school and would take on a training feature in the later years of secondary school [111].

Colombia followed more or less the same steps, with an important difference. The Colombian programme for curriculum change in the vocational area was put forward through the well equipped and well staffed INEM schools. This scheme had more or less the same targets as those of the lower secondary schools in Brazil. The INEM programme was directed towards economic less advantaged areas in 19 capitals and accepted a clientelle which was going to secondary school, after nine years of primary education. In Brazil, in a similar kind of scheme, the pupils in PREMEN's schools came from lower strata and had only eight years of education in all, the first four or five being the basic education provided by the state in Brazil. Therefore the Colombian vocational education programmes were at a higher initial level in the INEM experiment, whereas in Brazil vocational curricula were tested in the lower secondary schools only.

The similarity of the two structures ceases when one notes that vocationalization took different paths in
Colombia and in Brazil, through different structures, although with similar aims. The aim of both PREMEM schools and INEM schools was to provide a curricular model for vocationalization. The means those schools were granted were also similar: special buildings with specialized teachers and equipment. However, the level and the ages of pupils were different: the Colombian structure offered courses equivalent at secondary school certificate, in Brazil, the scheme only offered a lower secondary course (from the fifth to the eighth year).

At the end of the period which this thesis is examining, Colombia adopted a nine-year basic education programme, along with the adoption of intermediate pre-professional career training and the comprehensive model of INEM for curriculum diversification. In Colombia, the purpose was that in secondary schools, all children should have to pass at some stage through vocational training. Brazil adopted an eight-year basic primary programme: Escola de primeiro grau (Primary school) followed by a vocational upper secondary and pre-vocational programme in the lower secondary level. The aim in the case of Brazil was, initially, to induct all secondary school students into a vocational training in order to "prepare them to work"[113].

There were movements both backward and forward during the implementation of these policies. Requirements in both
cases were quite clear: schools should undergo a great change and make an effort to adopt vocational curricula. The mechanisms put forward for allowing the adoption of the reforms were dependent on the bureaucracies and on finance from centralized administration of both countries. Because of the difficulties found in putting these policies into execution and also due to the resistance encountered, in both cases, legislation had to be altered in order to put the reforms into effect. New interpretations of vocationalization were then put forward in both countries. In Brazil there was a shift to a wider concept of preparation for work, whereas in Colombia the Ministry of Education introduced new diversified curricula for the whole secondary level [114].

4.4 The political context of educational change in dependent societies

This section will look at the internal forces which combined to shape a modern society in dependent developed countries and consequently affected the elaboration of educational policies.

This section argues that in dependent societies the nature of state should be discussed in relation to social classes to understand the role of social reforms, education
among them. It will be argued that the social composition of the state is as influential on educational reforms as the character of the political regime.

In Brazil and Colombia the social pressures and demands for better and more education from the lower strata were met by policies which tried to co-opt those segments within society and make them participate in the elite's project.

In both countries economic and political elites joined to pursue economic development with the support of international assistance. However, as was noted earlier the contradictions of dependent development allowed new groups to emerge within the state, neutralizing the elite's dominant role.

In order to test these arguments this section will be subdivided in two main subsections; the first will analyse the Brazilian State after 1964 and the other, the Colombian State from the National Front.

The State in dependent societies

When F. H. Cardoso analysed the Latin America socio-political development, he noted that the two most influential forces inside countries like Brazil and Colombia were the active state sector and an
"internationalized bourgeoisie" [114]. The counterbalance of these two components of the political life produced the background for social reform. This process has been dependent upon two tendencies,

the increasing association of local bourgeoisies, in a subordinative way, with international monopoly capital interests, and the occupation of certain sectors of the state and economic public sectors by specific groups among the "middle classes": officers in the armed forces and technocrats [115].

Such changes in the composition of the State, depending on historical peculiarities, have varied, from country to country, but basically new alliances were formed within the State between three groups: local elites, the armed forces and technocrats [116]. This alliance and the relationship between international and local interests has brought about a new kind of interdependence and affected the role of the State.

More recently, analyses of the State in Latin America have shown a peculiar dynamic which was produced by the insertion of the majority of these countries (including Brazil and Colombia) into the international market and the development of peripheric industrialization. That dynamic
implied changes in the social composition of the State which brought consequences which policies were proposed.

Moreover, even in cases where the State became authoritarian, the government put forward programmes and policies which were designed to give an appearance of popular support [117]. The role of the local interests has indirectly challenged international interests represented by the association of local elites with international capital. This interplay affected the State's role in the introduction of social policies such as educational reforms, more than other political factor.

In the next subsections the theoretical approach sketched above will be applied to two concrete situations: Brazil and Colombia.

4.4.1 The Brazilian State after 1964

The purpose of this subsection is to look at the changes in the Brazilian State after the internationalization of its economy, mainly after 1964, which reflected in the internal policies such as vocational education.

A complex relationship between the State and local groups and groups linked to the international sphere developed after the military coup of 1964. Since then,
successive military governments have encouraged stronger relationships between local internationally-orientated economic groups, and the concerns of international monopolies.

The alliance within the Brazilian State was formed then by the industrial elite, the military and the middle classes co-opted by international enterprises or state-owned enterprises [118]. This alliance gave support to the new economic model of development, led by the military and technocrats.

4.4.1.1 The social composition of the State

The identification of dominant groups in the Brazilian political scene is important in illuminating the internal constraints on the state's action. These groups are identified as "modern segments" of the upper and middle classes and are personified in the phenomenon of the technocrat [119].

The technocrats can be found in both public and private enterprises and state administration. They have been used by the armed forces to control the State since 1964. Beyond that, the State has taken charge of the process of centralization of capital accumulation and has
been the guarantor of the social ascent of the lower classes within the elite's project of development.

During successive military governments the technocrats performed an outstanding role in Brazilian political life. Increasing authoritarianism restricted access to the decision-making process, and only powerful economic vested interests had access to the technocrat groups when they came to dictate economic policy [117].

The political climate after 1964 favoured centralization to such an extent that some political decisions were being taken by second-ranking staff officials, who took no account of civilian opinion. Cardoso has observed that the dependent character of the Brazilian economy combined with a bureaucratic and centralized tradition of administration, has given rise to the country's institutional framework. In addition, this author's analysis of the Brazilian State suggested that since 1964 the state has been reorganised as a hybrid system of oligopolistic interests (multinational corporations) and strong state-owned enterprises, where the government control over the civilian society has been increased [118].

The characteristics of the Brazilian State reviewed here as a background to the educational reforms which led to vocationalization policies, and it is that relationship which is reviewed in the next section.
4.4.1.2 The authoritarian strategy

This subsection will review the main characteristics of the military governments in Brazil after 1964, which affected educational policies, including vocational education.

It is argued that educational policies have been an instrument of the State's co-option of the groups outside the elite alliances mentioned earlier. Educational reform, and specifically vocational education, fitted into the model of economic development and the social strategy of the governments. Social policies and reforms in this case were envisaged as a means of compensating the social groups which had not directly benefited from economic development.

Indeed, the real purpose of those policies, in the views of specialists, [122] was to create steady conditions in order to not impede economic efficiency.

The military regime in Brazil went through two different phases: the first two governments were a preparatory phase to improve a capitalist infrastructure; the second phase began during the third government when the infrastructure permitted a rapid economic expansion.

Although the first two governments after the military take-over made great efforts to modernise administration as well as to encourage economic growth, the third government,
under General Medici, abandoned any pretence of improving the country's democratic structure and embarked on an ambitious programme of economic engineering designed to create a new modernised and powerful nation [123].

Nationwide government publicity and political slogans became common in order to transmit to the masses the government's zeal, where previous military governments had mainly used rhetoric to allay doubts about their political legitimacy. The regime then set about a fullscale ideological campaign, choosing efficiency as a prime criterion of all policies [124].

In the period which followed the Milagre Económico (Economic Miracle), the government found itself in need of another catalytic agent. With the masses under control, and salaries constrained to a bare minimum, the government had to find a new means of mobilising a society which was facing political stagnation. The formula found was the so-called Projetos-Impacto (Impact-project) programmes. Plans were developed in various State offices, whose aim was to communicate to the public the idea of a government deeply concerned with the nation's welfare [125].

In general, those impact-projects had a social aspect and tried to come to terms with some of the most controversial areas of social welfare policy. Among other problems they dealt with social security for the employed (PIS), land reform (PROTERRA), and unionisation of land
workers (FUNRURAL), and finally the reform of the educational system [126]. This was what the government's spokesmen called "a relative democracy" or "social capitalism", in opposition to the liberalism and socialism [127].

The "impact policies" did not include educational reform; this was actually an initiative of the executive branch of government. Through, the Education Law 5692/71, the authorities wished to demonstrate their concern with social demands, and education reform was anticipated amid other social measures.

The law which introduced vocational education was passed, in a period characterised by political stagnation, with all the instruments of popular participation tightly controlled or subdued [128], but in a context of the Milagre Econômico (economic miracle), with the increase of the GNP up to 10%. The "miracle" was made possible through an expansion of the consumer goods market, both for internal and export purposes, and also through the freezing of workers' wages [129]. According to Cardoso, the Minister of Finance representing economically dominant groups had a pact of "non-interference in the routine" with the Presidency, whereby the minister retained full powers of veto in all political matters [130]. The pact meant that any policy, like the impact-projects, would never really affect economic efficiency, and the interests of
economically dominant groups, whose interests were linked to monopoly capital and multinational enterprises [128]. In fact contradictions between groups in the State's machinery [129] and the interests of the private sector, meant that benefits of social policies were stopped from reaching the underprivileged strata they were supposed to benefit.

4.4.1.3 The role of vocational education

This subsection will look at how the authoritarian regime in Brazil implemented the educational reform that brought about an extension of primary level education and also introduced vocational education into mainstream of the secondary school.

This subsection will argue that education became a key element within the ideology of economic development at that particular moment of Brazilian history, and that the vocational education reform served as a justification for the authoritarian government. Commitment to the policy was not strong and the lack of success in implementation lay in political causes as much as lack of money.

Educational change in Brazil, during the 1970s, was related to the political characteristics of the country at that very moment and changes followed the rationale of the policies put forward by the authoritarian regime after
1964. The relationship between State bureaucracy and national development ideology, and the various ways such ideology was channelled to the population (for example the Projetos-Impacto) also affected educational policy.

As part of the policies created to give a democratic face to an authoritarian regime, the reform of the primary and secondary school was supposed to meet, at the same time, the state's and people's needs. However, because of the stress on economic principles, education was low in the government's priorities despite the efforts of MEC and MINIPLAN.

As an example of oscillation in focus, the reform of higher education of 1968 had been designed to benefit certain aspects of economic development. It would allow the middle classes to gain access to the places they demanded in Brazilian universities. However after 1968, the expansion of higher education took place mostly in private colleges which were used to absorb social demand for places in the universities. In other words, although higher education reform was a policy supposed to meet the need for economic rationalization and growth, it became more a governmental answer to social demand than to economic requirements [130].

Following higher education reform, the primary and secondary education reforms were introduced by Law 5692/71, which institutionalised the compulsory vocationalisation of
secondary level. At first, it was conceived by the planners as another economically-oriented reform designed to meet the requirements of a modern economy. This was the main rationale put forward by its creators. The technocrats in the Ministry of Planning and the educational authorities in the Ministry of Education, shared this belief with educators and planners who contributed to the elaboration of a new draft of law [131].

However, examining the context that surrounded the reform, and the subsequent impact on the educational system, this reform was just as useful in meeting social demands on education. In other words, what is being noted, is that the vocational education reform in Brazil was not taken as a priority - in spite of the rhetoric about it - by those who had put the new law into practice. Documents issued by the Federal Council of Education, and the implementation unit of MEC (Ministry of Education), stressed the lack of financial support by the government and the conclusion may be drawn that the reform was not a high priority. The financial resources provided had never been sufficient to its implementation [132].

One explanation for this situation is that under the military regime, mainly to avoid external criticisms about the political constraints imposed on opponents of the regime, the Brazilian government had to demonstrate concern for the recommendations and advice addressed to "developing
countries" by international conferences [133]. Such demonstration was important for the recognition of the regime externally, and would confirm that the Brazilian government was making efforts to meet international standards in social policies. Equally important was an economic element to show how the country was sensitive to the demands of foreign investors [134]. However, internally, the authoritarian strategy could afford to postpone the implementation of these policies, or at least, slow down the reforms.

Overall this subsection tried to clarify what were the main constraints within Brazilian State in relation to the establishment of vocational education policy amongst the other reforms in the 1970s. The context of the reforms and the role of the State after 1964 included: authoritarianism, a strong belief in economic development through association with international capital, alliance with groups from middle strata, but little discussion of policies. Other characteristic of Brazilian political scenario was the government's attempt to create legitimacy through social measures to co-opt lower strata, within a stress on economic development goals pursued by the national plans. The complexity of the social context, within which the development plans were conceived, stopped the achievement of vocationalization; a point and a
paradox in Brazilian process of development which will be reassessed in the next chapter.

The next subsection will offer a similar analysis of the role of the State in implementing vocational education in Colombia.

4.4.2 The Colombian state during the National Front

The purpose of this subsection is to analyse the role of the State in Colombia and the relationship between the state and the introduction of vocational education in secondary schools as part of major reforms to modernise the country.

It will be argued, that the Colombian state although it has elected presidents and a dual-party structure functioning also reflects an elitist kind of social integration; and that although vocational education could be seen as an attempt to break this pattern it is hard to find any democratization in terms of social opportunities after the introduction of vocational curricula at secondary schools, according to recent studies [138].

The establishment of the National Front is a well known turning point in contemporary Colombian political history since it put an end, in 1957, to the brief dictatorship of Rojas Pinilla, starting an alliance between the two
traditional opposition parties. This alliance introduced a new political balance into Colombian society, helping to end to the bloodshed known as la violencia. This compromise allowed the Colombian government to concentrate on economic development [136].

4.4.2.1 The social composition of the state

This subsection will look at the social composition of the State during the National Front period in power to examine its implications for the adoption of vocational educational policies.

It will be argued that the social composition of State was not altered, but reinforced the elite's domination; however, some reforms have to be allowed to facilitate the modernization required by economically dominant groups.

Thus there was no revolution, but rather a re-arrangement of the dominant elites whereby they reaffirmed their economic and political control of the country, as most analysts confirmed [137], in a context of the insertion of Colombia in the international market combined with major changes in political and social life [138].

The characteristics of the new political context have been analysed from different perspectives, which will be reviewed here, to put into relief the most persistent
features the State has taken under the rule of the National Front.

The first kind of analysis stresses that the National Front institutionalized politically the "economically dominant groups which constitute the elites in Colombia [139]. According to this view, the politics of the State are realised through a well-defined bureaucracy, in which the posts are shared by the followers of the two parties. Thus the groups that were influential in the State apparatus were those which occupied posts within the two-party system.

The relationship between the economically dominant groups and the Colombian State has been affected by the explicit demands those groups make upon the State. In other words, there has been a "mutual and reciprocal influence and consensus" between the Colombian State and the economically dominant groups [140] on a strong class-based model. The dominant elites in both parties have shared political and economic power.

Such an interpretation, however, is opposed by other studies which point out the complexity of Colombian politics. In accordance with this view, what is called the "progressive reformist model" has as its main characteristics:

Firstly, moderate economic and industrial development, secondly, regionality and a balance
of power between rural areas and urban centres, thirdly, the formation of a middle class with a clear social identity, fourthly, social confrontations with no clear-cut class bias, and fifthly, the institutionalisation of the coalition between two strong parties, which appealed to many classes, leading to a predominance of centrist government strategies [144].

In the light of this definition, the Colombian model can be summarized as the exercise of political powers by the traditional elites under a democratic dual-party framework. This has allowed the extension of certain social rights to less privileged groups despite the fact that these lacked autonomous organization [145].

The most salient feature of this interpretation is that the sharing of power, between the dominant groups through the dual-party system, led to a weakening of the power of the State. This weakening process is considered by various authors [146] as being a key element in explaining the malfunctions of the Colombian educational system, as well as more general trends in Colombian society as a whole.

A third view of the Colombian political phenomenon emphasises foreign influences - a theme of the last chapter - as well as internal conditions [147]. The State’s initiatives were in accordance with international agencies'
recommendations. Social policies were generated to deal with land reform, improvement of labour conditions, revision of minimum wages, efforts to generate more employment and control and regulation of transport and food prices. Other measures were taken on housing, expansion of the school system and health and social security programmes. The various Colombian elites knew that to achieve economic development, it was necessary to stabilize social forces, while providing the country with satisfactory conditions for economic expansion.

In the last three decades, the National Front coalition has provided the political background to the modernization of the country and has given a peculiar character to Colombian "democracy". Two parties alternated in holding the presidency over sixteen years, avoided a military dictatorship as well as the presence of a populist type of leadership.

If, in the light of other Latin American countries' recent political history, Colombia could be considered a healthy exception, it is also undeniable that such political stability was achieved with a conspicuous absence of participation on the part of popular forces in the political consensus. The political power in Colombia, constituted by the elites, combined repression with the co-option of some populist leaders, while at the same time
extending some economic and social benefits to the lower strata [148].

Thus under the National Front, the Colombian state underwent some re-organization in formal terms but remained unchanged in its composition. The most noticeable feature of the Colombian political structure was the painstaking attention paid to achieving maximum equality in the division of power between the two factions or parties. Populist political formations like ANAPO were annihilated, and consequently, the balance of power was kept within the traditional elite [149].

The Colombian government remained elitist, in a society marked by a poor integration of the lower social strata into the political decision-making process. This was the political context which brought about the policies on vocational education as a means to change the secondary schools aim.

4.4.2.2 The National Front political strategy

This section will discuss the strategy adopted by the state to achieve the development aimed at by the elites.

It will be argued that one of the major tendencies in Colombian politics since the establishment of the National Front pact has been the modernization of the country by
means of administrative reforms [150]. In fact, since 1958, the country experienced three administrative reforms, which tried to encompass the needs of a modern society. In addition compulsory government planning was established in 1958 and incorporated into the National Constitution by 1968.

These successive reforms have brought about tension in recent years between the two tendencies found inside the Colombian State, namely, *politicalization* and *technification*. This has meant an alternation in the policy-making process, between the representative bodies executive branch of this same process [1151]. While the representative power saw a decline in its effectiveness under the above reforms, the executive extended its technical branches through the National Oil Company, the National Bank and the National System of Apprenticeship, SENA.

This tendency increased since the 1968 administrative reform which reduced the executive tasks of ministries and strengthened a number of institutes or similar organizations in a decentralised way. The effects of the reform have been "the balkanization of decision-making and resources within the government apparatuses", as one Colombian analyst observed [152].

The changes in the Colombian State undermined the centralised power of decision-making, which has been replaced by *ad hoc* offices. While discussing foreign
influences within the Colombian political system, the Colombian author Fernando Ulloa established a series of indicators that show how these new ad-hoc institutions overwhelmed the traditional focus of power which had been centred on the minister's council [150]. As a consequence, he said, traditional government institutions" have responsibility, but have no power and those new institutions which have power, have no responsibility" [151].

The role of the international agencies in the economic development of Colombia has contributed to this process of weakening political decision-making since the National Front settlement. Such an argument has clearly been stated by Ulloa:

_The National Front in Colombia has facilitated 'de-politicization' through the International Agencies. The modernization design has since been reinforced. It was not by accident that Colombia was regarded as a laboratory in which all projects could be tried_ [152].

In practical terms, the consequence of this displacement of decision-making power has been the creation of planning bodies which have overwhelmed the bureaucracy along with an increase in the power of the Departamento Nacional de Planeación (Department of National Planning) over all government mechanisms and practices.
Such a pattern of policy-making affected the relationship between the State and the educational policies. Vocational education specifically became one policy to mend the incongruities between the economic model and social environment.

Thus during the National Front government and the period afterwards, instead of a strong state to put the reformist model forward Colombian administration was carried by ad-hoc institutions and a new technocratic apparatus paralleled the state's traditional powers. This new way of dealing with State policies had a great impact in the implementation of vocational education reforms.

4.4.2.3 The role of vocational education

The purpose of this subsection is to look at the meaning of vocational education in relation to the evolution of Colombian social-economic context.

The major educational reforms, and the establishment of vocational education policies coincided with the three phases of the Colombian process of modernization, which began in the 1950s, was strengthened in the 1960s and began to wane after the 1970s.

The first five-year plan for education was elaborated and began to be put into practice between the end of 1950s
and the beginning of the 1960s. During this period the policies of vocationalization were in their early stages. National development plan recommendations suggested the adoption of diversified curricula and were responsible for the inauguration of pilot schools.

The second phase was the peak of policies of modernization and the country's economic growth under the National Front. In this period educational programmes such as the INEM, were put in place to establish a pattern of vocational curriculum later to be spread to the regular system.

The third phase occurred when the development of the country, orchestrated by National Front politicians and technocrats linked to international agencies, began to face problems. Unemployment was one of the most serious threats to Colombian economic and social development. Since the end of the sixties it has been looked at by various governmental measures trying to cope with what was a serious consequence of the new developments in the agrarian and industrial sectors [156]. Vocational education emerged in this context as a tool to solve problems caused by economic expansion.

As was noted, the period of rapid modernization slowed. Then new arrangements were needed to meet national problems such as demographic expansion as well as urban and rural
unemployment. The re-arrangements in the economy were put forward through new National Economic Plans such as *Las Quatro Estratégias* [The Four Strategies] and *Para Cerrar la Brecha* [To Bridge the Gap] [157].

In these plans, vocational education was seen as a means to bring education closer to production. The policy designed to put into practice the vocational programme in this phase was built by politicians from the Ministry of Education and technicians from the National Planning Office. During this period the rationale which supported the educational reform did not change and the government had to find a better way to operationalise the relationship between education and production.

The latest education reform with the purpose of providing all secondary school pupils with some kind of vocational training was proposed in 1978. This policy was also intended to retain part of the labour force in schools to avoid unemployment [158].

Thus in Colombia vocational education became a way to adjust incongruities between the economic model and the social environment. Through successive reforms of secondary education, Colombian governments offered a new kind of solution for the increase in the educational demand first, and to the problems of unemployment of the youngsters later.
This chapter discussed the internal influences over vocational education, through an analysis of the internal socio-political conditions which helped to shape such policies.

The economic and social conditions which surrounded the planning and implementation of vocational education in Brazil and Colombia were subject to similar constraints. Basically, the two countries shared the characteristics of a dependent developing society, with a similar social composition of the state and used similar policies to co-opt and equalize the differentiated groups within societies undergoing to a similar process of development.

However, despite these similarities, the direction of educational change was distinct in the two countries. This variation was due to the means the state in each country chose to put their national development strategy forward: in Colombia, a kind of democracy of the elites controlled popular aspirations tightly; whereas in Brazil, a forceful military regime had a much greater power to pursue a new strategy of development.

In Colombia development policies were the result of a dual-party coalition, whereas in Brazil this task was performed by a military dictatorship. So the regime in
Brazil needed legitimization through social policies, in a different way from the liberal measures taken by the National Front in Colombia.

However, both kinds of regime had a reformist connotation. In Colombia it was represented by the so-called 'concepcionista' strategy (strategy of concessions) in social policies. In Brazil the strategy was aimed at creating a 'integracionista simbólico' regime (a simulated integrative regime).

The assumption that vocational education could play a role in the improvement of educational provision and in the avoidance of unemployment came through the beliefs then spread by planning. As a consequence, the State used the work of technocrats, or politicians alike, to articulate the relationship between economic structures and education. In this context, vocational education emerged as a new form to insert young people into the productive world, as a type of education fit for an industrial-based economy.

The role of the local elites in this process was to support and to spread the ideas upon which vocational education programmes were conceived. Throughout the National Front period, the Colombian economic elite provided the main source of leadership in the country's political scenario. There was no popular participation in government decisions.
and there was no apparent discussion or disagreement over educational policy matters.

In Brazil, however, the economic elites were opposed by other political forces inside the state. As a consequence, the middle classes were represented in the regime, which did not extend participation to the lower strata. (The only concession came through social policies, established from the top without discussion or participation, as in the case of education reform.) Educational and other reforms were conceived in closed cabinets and came about through decrees.

However, very few concessions were made to the lower strata in both countries, by the dominant elites, notably educational policies trying to democratize the secondary level. This kind of programme offered an alternative schooling to the less privileged, and reduced the pressure on higher education entrance. At the same time, vocational programmes would be useful to create a better work force in the eyes of entrepreneurs.

As it has been noted, the power of educational reforms, including vocational courses, to solve simultaneously problems of the economy and social demands is very doubtful [159]. This kind of programme however, was privileged by the two countries at a time when there was a
on higher education entrance. At the same time, vocational programmes would be useful to create a better work force in the eyes of entrepreneurs.

As it has been noted, the power of educational reforms, including vocational courses, to solve simultaneously problems of the economy and social demands is very doubtful [157]. This kind of programme however, was privileged by the two countries at a time when there was a greater demand for primary education or general secondary education. The internal forces represented by the mediation between the state and elites had the last word: the kind of education supposedly more linked to the world of work was chosen as the tool to improve the whole educational system.

NOTES AND REFERENCES


3. This institution located in the Ministry of Planning, which firstly was called EPEA, *Escrítório de Pesquisa Econômica Aplicada* (Applied Economic Research Office) was assisted by various foreign consultants including a group from University of California at Berkeley financed by U.S. aid. See Fichter, op. cit. p. 119.

4. Ibid. p. 120.


7. The term "interdependence" was employed by more than one of the Ministers of Finance in post-1964 Brazil to explain the new relationship between the country modernizing elite and external capital. See M. de L. Covre, *A Fala dos Homens, análise do pensamento tecnocrático* [The speech of the statesmen, an analysis of the technocratic thinking], São Paulo: Brasiliense, 1988, p. 39-47.

8. An account of the political shift in Brazil after 1964 and the role of the military is in Fiechter, op. cit. p. 23-34.

9. Ibid., pp. 51-61.

10. IPES had an important role in the overthrow of President Goulart by the military and also helped Castello Branco
modernizing reforms. See Fiechter, op. cit. p.28.

11. Ibid., pp.50-51.


16. Ibid. p. 211.


18. See Maria I. S. de Souza, Os Empresários e a Educação - IPES e a política educacional após 1964., [The entrepreneurs and education - IPES and the educational policy after 1964], Petrópolis: Editora Vozes, 1981. This study provides a comparison between the educational policies of the military regime and the proposals of Brazilian entrepreneurs.


20. Ibid., p.115. See also Fiechter, p. 172-173.


25. President Medici's so called "authoritarian centralism" is described in Fiechter, op. cit, p. 178-182. See M. I. S. de Souza, op. cit., p.134.
27. In 1968 the Decree n. 63.281, created the Centro Nacional de Recursos Humanos [National Human Resources Centre], located within Ministry of Planning aiming at promoting studies on the needs of human resources and qualifications to economic development. Romanelli, op. cit., p. 227.
34. Fiechter, p. 208; M. de L. Covre, op. cit. p.123.
35. Ibid., p. 123.
See also Dermeval Saviani, Política e Educação no Brasil, [Politics and Education in Brazil], São Paulo: Cortez Autores
Associados, 1987. This work offers an overview of the discussion of educational policies within the Brazilian Congress over the military regime period. "The exclusory regime", says Saviani, "had halted all the discussions on the proposed policies". D. Saviani, op. cit., p. 128.

37. Brasil, MEC, DEM, [Brazil, Ministry of Education, Department of Middle Education], O que é o ensino de Segundo Grau, [What is Secondary Education], Brasília: MEC, Departamento de Ensino Médio, 1978.

38. Ibid.


40. See Aline Helg, Civilizer le Peuple et former les élites [Civilise the people and educate the elites], Paris: L'Harmattan, 1984, p. 195.


43. An account of the evolution of educational policies in Colombia is offered by Mario Díaz, A model of Pedagogic discourse with special application to the Colombian primary level of education, PhD Thesis, Department of Sociology,

44. An overview of the social implications on Colombian educational reforms is available in André Benoit, *Changing the educational system*, Munchen: Arnold Bergstraesser Institut, Weltforum Verlag, 1974. See pp. 203-213.


46. Ibid., p. 254.

47. Ibid., p. 255.

48. Ibid. p. 254.


50. Ibid., p. 69.

51. Ibid., p. 70.

52. A brief but interesting interpretation of the National Front educational policies is in Gomez-Buendía and Losada-Lora, op. cit. pp. 293-299.

53. Ibid. pp. 24-25.

56. See Gomez-Buendia and Losada-Lora, pp. 130-139.
58. Ibid., pp. 24-25.
59. For an interpretation of ICETEX role, and the creation of SENA see Aline Helg, op. cit., p. 163. See also Gomez-Buendia and Losada-Lora, p. 38.
60. See Gomez-Buendia and Losada-Lora, op. cit. pp. 29-45.
61. Ibid., pp. 40-44.
62. Ibid., p. 19.
63. Ibid., pp. 19-20.
64. Ibid., p. 246.
65. Ibid., p. 262.
66. Ibid., p. 263.
67. Ibid., p. 246.
68. This was the explanation for the need of a new educational law from the Ministry of Education, quoted by Mark E. Hanson, op. cit. p. 107.
69. Ibid., p. 109-110.
70. Ibid., p. 110.
71. Ibid., p. 114.
72. Ibid., p. 115.
73. Ibid., p. 115.
74. Ibid., p. 115.
75. See C.F. de Machado, op. cit. p. 25.
76. Mark E. Hanson, op. cit. p. 115.
77. Ibid., p. 117.
78. Ibid., p. 117.
79. Ibid. pp. 118-119. See also C. F. de Machado, op. cit., p. 35.
82. See Georges-André Fiechter, op. cit., pp. 206-212. This author described the partial reforms of the military government as being a kind of "Integration through practical achievements".
83. Maria de Lourdes M. Covre has provided an opposite interpretation to the reforms in Brazil after 1964. The rationale behind the policies is called "social capitalism" by Covre, op. cit., pp. 46.
84. See an analysis of the working class conditions in M. de L. Covre, op. cit., pp. 126-129.
86. The function of educational reforms in Brazil was analysed by Demerval Saviani, Política e Educação no Brasil [Politics and Education in Brazil, São Paulo,: Cortez & Autores Associados, 1967, pp. 125-126. See the role of educational reforms in Colombia in Mário Diaz, op. cit., p. 219-220.
87. For the role of ANDI in Colombia see M. Diaz, op. cit.
pp. 211, and Helg, p. 220. The role of CNI was appointed by Otaísa Romanelli, op. cit., p. 166.

88. The discussion of the teacher's organizations in Colombia is the central issue in Gomez-Buendía and Losada-Lora, op. cit. pp. 174-240.

89. D. Saviani analyzed the participation of selected intellectuals in both reforms during the military period as a kind of "consent" to the regime and stressed the lack of discussion of the primary and secondary school reform. See Saviani, op. cit. p. 91 and p. 128.

90. For an account of these populist measures through educational reform see Gomez-Buendía and Losada-Lora, op. cit. p. 264.

91. See Fiechter, op. cit., pp. 208-212. See also F. H. Cardoso, op. cit. pp. 201-204.

92. See A. Benoit, op. cit., pp. 253-254, for an account of the demand for secondary education expansion in Colombia and O. Romanelli, op. cit. p. 112, for this demand in Brazil.

93. The social control function of Colombian education was stressed by Aline Helg, op. cit., p. 251.

94. This conclusion is being achieved after the perception of how the proposals were diverted by the implementation of the policies. See M. de L. Covre, op. cit. pp. 206-207. See also F. H. Cardoso, op. cit. p. 212.

95. This divergence was first perceived in the first educational plans which were formulated with the help of the Federal Council of Education. See M. I. S. de Souza, op. cit.
96. After 1971, however, there was a total agreement to the principles of the technocrat rationale on educational matter. See Covre, op. cit. p. 208-212. A description of the pattern of the political and administrative powers within the Ministry of Education in Brazil was offered by Ronald Braga, "O MEC e o poder" [MEC and the power] in Edwards Brasileira, Brasília, vol. 6, No. 13, 1984, pp. 87-110.

97. See M. I. S. de Souza, op. cit., p.133.

98. See M. de L. Covre, op. cit. p.204, for an analysis of the discourses of Roberto Campos, Mario H. Simonsen and Reis Velloso on educational policy.

99. Ibid., p. 204-205.

100. See note 92 above.

101. See Demerval Savani's discussion about this aspect in Savani, op. cit., p.128-132.


103. See G.A. Fiechter, op. cit. p. 117. See M. E. Hanson, op. cit. pp. 67-91.

104. See Gomez- Buendía y Losada-Lora, op. cit. p.126.

106. See C. Franco de Machado, op. cit., p. 38.
108. A description of the PREMEM schools was provided by Nunes, op. cit., p. 164-165; see also J. O. Arapiraca, A USAID e a Educação Brasileira, São Paulo: Cortez & Autores Associados, pp. 112-115.
110. Minister Passarinho stated: "Education predetermines development, renouncing a mere propedeutic system of education, to replace it with one that progressively valorizes the student, banishes the mediocre secondary school, prepares the technicians and incites a true revolution in its sociological connotation: cute the illness out at the roots." See Exposition of Motives No. 273, 30 March, 1971, presented by His Excellency the Minister of Education and Culture, in Brazil, op. cit. p. 30.
113. Ibid. p. 128.
114. Ibid. p. 130.
115. Ibid. p. 130.
116. See M. de L. Covre, op. cit. pp. 112-117.
117. Ibid. p. 63.
118. F. H. Cardoso, op. cit., p.196.

119. See M. de L. Covre, op. cit. p. 250.


121. Ibid., p.127.


123. See Fiechter, pp. 208-209. An opposite view is offered by Cardoso, op. cit. pp.201-204.

124. The expression "relative democracy" or "social capitalism" are the terms used by M. de L. Covre to explain the technocratic-military regime in Brazil, after 1964. This kind of regime, she says, "is characterized by being an intermediate system of development between the liberal capitalism and socialism." See Covre, op. cit. p. 235.

125. See Saviani, op. cit. p. 128.

126. See Fiechter, op. cit. p.192. See also Jan K. Black, op. cit., pp.91-94.

127. See F. H. Cardoso, op. cit. p.204.


129. See Saviani, op. cit., pp.126-127. The author mentions, quoting Michel Debrun, the presence of "dissent elites" within the State who were interested in the reforms.


131. See Saviani, op. cit., p.126. This author shows how the
Education Law 5692 had a technicist character and "a preoccupation with the technical improvement, the efficiency and productivity seeking for the best of results with a minimum of expenditure".


134. The following conclusion was quoted from the United States General Accounting Office, by J. K. Black, op. cit., p. 242: "the decisions of both AID and the Brazilian government represented 'an education policy based solely on economic considerations and not on a more equitable distribution of education opportunities' (...)." Similar sort of conclusion is offered by Covre, op. cit., p.212.


137. See Mario Diaz; op. cit., p.200.

138. M. Diaz, op. cit. p. 204; see also Stephen Clissold, op. cit., pp.148-149.

140. Ibid. p. 25.


142. Ibid. p. 91.


144. F. C. Ulloa has shown this Colombian tendency in his article, op. cit. p. 97.

145. The balance of power in Colombia after National Front came to end has changed again as G. Buendía and L. Lora noted. See G. Buendía and L. Lora, op. cit. p. 264.

146. Ibid., p. 272.

147. See Mark E. Hanson, op. cit. p. 107.


149. Ibid., p. 25.

150. Ibid. p. 27.


152. Ibid. p. 96.

153. A historical description of how the problems of employment has affected educational plan in Colombia is in C.F.de Machado, op. cit. p. 25.; see also M. Diaz p. 227.
155. Ibid. p. 119.
156. However Psacharopoulos' studies have shown that the economic rationale which supported the diversification of secondary schools in Colombia was contradicted by the low payoff of the pre-vocational programmes. By the end of the decade, almost 70 per cent of enrollments in secondary education were in the academic curriculum. See G. Psacharopoulos and E. Vélez, *The External Efficiency of Diversified Secondary Schools in Colombia*, Washington D.C.: The World Bank, Department of Education Training, February 1987, pp. 3-5.
157. M. de L. Covre, op. cit., p. 229. This author offers a long discussion about the question of the economic and ideological aspects of education in Brazil after 1964. In this author's view the use of school for the economy was not exaggerated but was a consequence of the prevalence of the economic rationale in the politics of development chosen by the State.
The purpose of this concluding chapter is to offer an interpretation of the various policies leading to vocational education in the context of Brazil and Colombia. This chapter will look at vocational education reforms as an outcome of the context of dependent development. The chapter will discuss the reasons why the implementation of vocational education was not totally successful in that kind of context. Finally the chapter will look at the challenges posed by educational demands in these countries for the development of a new kind of secondary education.

This chapter will revise the main ideas used in this thesis by reviewing the questions asked in the Introduction. For this purpose, this chapter is subdivided in four subsections. The subsection 5.1 will answer the first question put in the Introduction: why were vocational education reforms proposed?.

Subsection 5.2 will offer an analysis of the relationship between the policy of secondary school vocationalization and the socio-economic context of Brazil and Colombia throughout the whole process of industrialization and integration of the
countries into the world economy. These ideas were mainly discussed in chapter 2.

Subsection 5.3 will discuss the issues related to the implementation of the policy in Brazil and Colombia: a) the lack of co-ordination between planners and politicians as an obstacle to implementation of the reforms; b) the limits and possibilities of the implementation of a foreign model of educational innovation based on the relationship between education and work; c) the use of "vocational education" for the ideological purposes of governments and the reaction of the different social strata to the reforms in Brazil and Colombia. So, this section will use arguments tested by chapter 4 to answer question (d) what were the obstacles to the implementation of vocational education in both educational systems offered by the socio-economic structures of the two countries.

Subsection 5.4 will discuss the consequences of the vocationalization policies in terms of the question: whose interests did these educational reforms try to match externally and internally and what lessons may learned for the future?

5.1 Factors of the adoption of vocational education reforms - a re-assessment
The genesis of vocationalization in Brazil and Colombia

As was proposed in chapter 1, the model of 'dependent development' helps to answer the question posed in the Introduction: why were vocational education policies adopted? It has been suggested that vocational education reforms of secondary education were a need which followed from both the economic and political structures of the two countries, after both had opted for the model of 'associated development'.

This model of development, which was analysed in chapter 1 and exemplified in the discussion of historical conditions of educational reforms in chapter 2, was closely linked to international capital and dependent on external assistance to achieve its objectives.

During the period under examination in both societies, in the sixties and seventies, the State was oriented towards economic achievement by economically dominant groups. During the military dictatorship in Brazil, the regime became more unjust and education was used by the authorities as an instrument of social control. In Colombia, the State has been politically weak, and it was affected by the predominance of influential organizations linked to economically dominant-
groups in the country. In both cases, political arrangements were made by the economic elites, the State, and the technocrats or politicians to allow the expansion of international corporate business.

In both Brazil and Colombia there was a replacement of the politicians as policy-makers by the technocrats in powerful governmental institutions. In Colombia, the planning offices were directed in such way as to follow the advice of the international agencies on the policies related to economic and social development. In Brazil after 1964, and under the influence of the agencies which provided assistance to development plans and policies, the technocrats and planners filled the main positions in the two Ministries which were most related to educational policies: the Ministry of Education and the Ministry of Planning.

Although the two countries had dissimilar political regimes, both adopted the same kind of policies. The characteristics of economic expansion within a new alliance with international capital, the non-participation of the lower strata in that expansion, and external assistance for economic and social planning were found in both societies.

The socio-economic and political framework of vocational education
In both Brazil and Colombia, vocationalization was attempted at various times under different labels: as a "polyvalent school curriculum", as a kind of "vocational guidance of pupils", and as a "new diversified curriculum".

Although the explicit purpose of the educational packages put forward by Brazil and Colombia during the sixties and seventies was to meet the needs of economic development within a short term, in Brazil the government introduced the so-called "projetos-impacto" (impact-projects). In Colombia the so called "progressive reformism" under the National Front also was launched with the intention to include the lower social strata, in the process of economic growth.

These reforms tried to respond to specific demands from the newly urbanized social strata: during the sixties, the industrialization and urbanization in both countries increased the demand for secondary education. This was also a result of the expansion of primary education during the 1950s. However it was noted in Colombia that the demand was clearly orientated to increasing the enrollments in the traditional bachillerato certificate of secondary school, against the expectations of the planners in the 1960s. At the same time, in Brazil, the discussion focussed on the demand for more public schools, especially at the secondary academic level (even though, within the Ministry of
Education the concern about the need of vocational education was beginning to develop).

The initiatives, introduced during the sixties, were in fact unable to cope with the demands for secondary education expansion and for a changed education from educational reformers.

As this thesis showed in chapters 2 and 4, these changes only occurred when new factors affected the socio-political and economic reality of the two countries. The sixties were the years of definition of the future strategies of development in both societies when industrialization was being consolidated. Changes in secondary education had to wait for the next decade, i.e. the 1970s, to be proposed and institutionalized.

The new model of economic development

The 1970s saw a new model of development, after a decade of expansion of enrollments. At this point there was already a group of factors developing during the 1960s, which combined to introduce changes into educational systems in both countries.

During the 1960s, in the Latin American countries, there was a new impulse to achieve economic development, which led these countries to attach their economies to the
international market, in the ways discussed earlier in this thesis. In particular, Brazil and Colombia intensified their modernization and undertook financial and administrative restructuring. The outcomes of those reforms were extended to all the other ministries and also deeply affected the Ministries of Education in both countries.

The purpose of that restructuring was to match education policies to the inter-sectorial goals of the national development plans. Public policies became dependent upon newly created "human resources units" within the national planning offices of those countries. The new kind of administrative bodies had, as their theoretical support, human capital theory, then broadly accepted among planners and technocrats.

Economic planning brought about a technocratic approach to education and other social policies. Here resides the first contradiction in the educational policies pursued in that decade. These policies were posed at a time when economic growth was based on capital-intensive investments. However, vocational education programmes advocated an extensive preparation of the workers, through non-academic courses. The stress was put on the preparation of the pupils for the labour market, on the assumption of a increasing need for qualified personnel.

However, these assumptions were inaccurate because the educational planners did not anticipate the resulting
mismatch between the economic model and the policies of training for jobs.

A further tension, discussed in chapter 4, was the tension between educational reforms, adopted with a view to economic development policies and social demands. Studies in Brazil, by Maria de Lourdes Covre [1] and in Colombia, by Aline Helg [2], stressed the importance of education as a form of social control and as a tool to achieve support for unpopular political regimes.

The governments' concern for the introduction of vocational education was partly explicable in those terms. In unequal societies, i.e. where the lower strata did not share the profits of economic development, educational reforms acted to create a favourable image for the government, both internally and externally.

In Brazil, as well as in Colombia, the introduction of a more meaningful programme of secondary education compared to the traditional academic secondary school, together with the extension of the primary level and the expansion of enrollments - even when it was done through the private system - suggested that these governments were trying to meet international standards in this sector.

However, the parallel process, in the sixties and seventies in Brazil and Colombia, was the expansion of the economy through the association of local capital with international investment. This fact shaped the socio-
political context of those countries and defined the role of the State. The educational sector was, among others, a particular field where the State interfered to create a favourable climate to its economic goals.

Through vocational education, the governments of the two countries assumed it would be possible to solve the problem of secondary education expansion, as well as to correct some of the effects, such as unemployment, of late industrialization. The introduction of vocational education policies occurred when both countries were undergoing a phase of late industrial expansion. However, the economic model was not able to cope with the uncoordinated expansion of school enrollments and it was necessary to discipline educational demand. Vocational education which was seen before as a social remedy, then took a more sophisticated form: there were several reforms in the two countries to change the general character of secondary schools into vocational with a view to preparing youth for work.

However, this too created problems.

5.2 The adequacy of the policy to the socio-economic context of Brazil and Colombia

Vocational education has been assessed as a policy in Brazil and Colombia in terms of three arguments. The first
argument came from human capital theory [3], and the belief that vocational education had the capacity to bring about economic development by increasing productivity and individuals' income; consequently, vocational education was a means to achieve economic development. The second argument originated in studies which looked at the relationship between education and preparation to work from a Neo-Marxist point of view: vocational education was proposed as a means to meet the needs of an hierarchical society; consequently, this kind of education was a tool to socialize the working classes in order to fulfil their role in capitalist societies [4]. The third argument was different: it stressed that vocational education reforms are irrelevant in preparing workers for the labour market [5].

Thus two of these theories "socialization of the working classes" and "human capital" stressed the existence of a direct link between schooling and production. The third approach, on the contrary, does not accept that link; does not see schooling and vocational education as a requirement of industry.

The present thesis, has rejected all three views in the terms in which they are phrased. The thesis has tried to suggest that education reforms are indeed important issues when there are changes in the field of production.
However, the precise nature of the correct response depends on the context in which the changes are occurring.

This thesis suggests that to be successful vocational education ought to have been closely related to the real changes in the socio-economic structure, offering job opportunities for most of the secondary school leavers.

This latter condition did not occur in the two dependent societies here studied. Vocational secondary schools in Brazil and Colombia, given the early secondary school expansion in the sixties, were unlikely to be able to absorb all children of average school age, given the speed of population growth. Vocational secondary programmes introduced with the purpose of training for middle level jobs did not achieve this aim. Even from a strictly economic point of view, the value of those reforms remained doubtful, as was shown in chapter 4.

As this thesis also observed in chapter 4, the reforms of secondary education served more as a political instrument, at the time they were adopted, than as a tool to meet economic needs. In the cases of Brazil and Colombia the reforms were advocated by politicians (or public authorities) seeking popularity and as a justification and demonstration of the public concern of the governments. The extension of compulsory primary education to nine years in Colombia and to eight years in Brazil demonstrated the same preoccupation from the authorities to provide a large-scale
basic education for the majority of school age children in the population. Here, maybe, resides the core of these reforms: if implemented, these countries could at least achieve universal primary instruction.

The ambition to prepare the youngsters for the job market at secondary level did not attract much support in the two societies. As was shown in chapter 2 and confirmed in chapter 4, in Colombia the demand for secondary schools has always been directed towards a non-vocational kind of education. Equally, in Brazil, the academic secondary school was traditionally preferred by the pupils and their parents. Government decrees were not capable of changing that situation. This thesis has stressed that by the time those reforms were introduced, there was a great demand for secondary education from the new urban strata in both societies. The composition of the urban strata was complex, and to meet their demands major financial investment from government was necessary.

In both cases, the countries' economies were under pressure: in Brazil the process of development and economic growth implied income concentration and the constraint of salaries. Colombia faced a growth of inflation after a period of economic growth due to coffee export prices. In both cases, expenditures on education were cut off by the governments for economic reasons.
Available studies in this field are still very few, but recent surveys in Brazil have shown how secondary education after 1971 has been overwhelmingly provided through private schools [6]. In Colombia, the same tendency has been traced.

In spite of the rhetoric used by technocrats, most of the education reform programmes in Brazil ended in the archives of MEC and MINIPLAN, without fulfilling a real role in the national scenario. The training for a job was allocated to other ministries and agencies, even before the last reform was implemented. The formal school system became a mixture of courses; without a mainstream, it lost its previous purposes. The "myth" of vocational training or job qualification within the formal system disappeared definitely with Law 7044 in 1981 [7], which cancelled the compulsory vocationalization of secondary education.

In Colombia, the support for vocational programmes, came from the World Bank, but the government was in charge of financing the dissemination of the model introduced by INEMs. As in Brazil, financial constraints led the government to establish other priorities than educational reform and vocational education did not achieve its purposes [8].

5.3 Obstacles to the implementation of the reforms: the bounds and the possibilities of vocational education
This section will discuss what were the obstacles to this achievement of purpose - the question raised as question (c) of Introduction.

**Planners and Politicians in the implementation of vocational education reforms**

As was argued in chapter 3 and 4, vocational education programmes and school system reforms in Brazil and Colombia were visualised and proposed by planners on the basis of foreign models and recommendations, and introduced by the State, as a means to fulfil economic and social needs. These needs were connected with the dependent character of development then in progress. As was discussed in chapter 4, in both societies those reforms were introduced without previous discussions, but with a great belief in the capacity of vocational education to fulfil employment requirements.

This thesis argued, in chapter 3, that the planners played a vital role in the process of introducing vocational education and borrowing a model of educational innovation together with the borrowing of the economic model of development. The reforms of educational systems were part of a package of loans and assistance programmes to economic development. In the Brazil and Colombia there
was evidence of earlier foreign influences on the introduction of vocational education programmes and educational planning.

In the process of modernizing the education system, there was a lack of consultation or co-ordination between the group of planners and political leaders, when the reforms were introduced. In the Brazilian case, the nature of the political regime explained the authoritarian way in which the government imposed the reforms. The government was above any consultation or discussion of the intended policies. In Colombia, the same lack of discussion, and a similar attitude of postponing the implementation of policies were found rather in a different political context. In this case the lack of will for full implementation of the reforms is attributable to the weakness of central government, (as was noted in chapter 4).

Thus there was a divergence between those who conceived the policies and those who implemented them. It seems that when planning was introduced both planners and decision-makers shared the technocratic point of view about the necessity of changing education to meet economic development needs. This kind of justification was expressed by international recommendations, technocrats, and local politicians in their statements about the need for vocational educational, as chapter 3 and 4 described.
Although these beliefs were widely spread at the beginning of the technocrats’ influence on both governments, to put them into practice would not be without contradictions.

The role of foreign aid

This thesis has suggested that the role of the planners in the process of building up social policies consisted in offering a technical justification for the desirable changes in education. The planners were also the mediators between foreign assistance and the government. This eventually became their main role: all the ideas, concepts, beliefs, which provided the foundation for the economic model of development, were transferred through the planning institutions to the other sectors of government and the society. In Colombia, as chapters 3 and 4 described, technocrats and planners played a decisive role bringing about those ideas through various ad hoc agencies created with foreign assistance.

It is difficult, however, to find a precise distinction between the technical and political actors in the cases which are being analysed here. In spite of their divergence on how to put into practice policies such as vocational education, the rationale underlying their action was the same. The opposition between the two sectors only
became clear when some other constraints affected the implementation of the reforms. The reforms were not opposed until their financial and practical obstacles became apparent.

There was no trace of any alternative approach to vocational education programmes and the pedagogical innovations which should follow their implementation, by the time they were suggested. In Brazil, as was discussed in chapter 2 and 4, Saviani reports in his study of 1980, [9] the final approval of the Law 5692 without any resistance or opposition to the project in the Brazilian Congress. A similar situation was found in Colombia, with the executive stronger than the legislative body [10]. Divergences, when they occurred, were about the ways to implement the intended restructuring of the educational system.

The educationists only challenged the vocational reforms after the model of economic development showed its distortions. There was little evidence of criticism of vocational programmes in Colombia, in spite of the opposition of the teachers' unions to the government's reforms as a whole. Similarly in Brazil there was only applause in the first stage of reform, with problems arising after implementation over the costs and inability of the system to absorb vocational programmes.
As chapter 4 has emphasized, the outcomes would have been different if the planners were less ambitious, less unaware of the structural and historical obstacles of changing the old values of educational systems. Furthermore, the educational reforms in Brazil and Colombia conceived by planners to match the major goals of a model of development based on the developed countries, were too ambitious. They did not take into consideration the financial and political constraints which characterized Latin American reality.

Even foreign finance did not fully solve these problems as was emphasized in chapter 3. The way planning sectors in Brazil and in Colombia borrowed ideas and suggestions from foreigners, during the sixties and early seventies, was one of the causes of the failure of educational innovation policies. The MEC-USAID agreements in Brazil, the USAID assistance to Colombia, and, afterwards, the World Bank loans to both countries, were thought to have done a great help to education. In reality, all these agreements were packages of measures connected to foreign aid and loans for the economic sector.

The vocational education concept sponsored by USAID and World Bank has been based mostly on North-American studies, made by North-American specialists. That meant the vocational schools and programmes, proposed for Latin America, were a North-American solution, created to solve educational problems previously experienced there. Moreover, the job market envisaged by those reforms, in the
United States, was specific to a particular historical period when there was great demand for skilled labour [11].

Formal system of education and vocationalization

The Brazilian and Colombian schooling systems faced a problem not present in the North-American experience: the contradictions between the need for expansion of the formal system of education and the improvement of vocational schemes. In Brazil and Colombia the education reformers did not contemplate an increase in the number of places in secondary education. The prospects for that increase were already poor in the plans. The difficult task of implementing the new policies was left to the schools themselves, with little assistance from the government. The school system had no capacity to do both things: to offer more places to the students and to introduce also major changes in the secondary curriculum.

The outcome, in both cases, is the great number of secondary private schools preparing for academic bachirellato in Colombia, or to entrance to a university in Brazil. Pupils who can afford private education are from the middle and upper strata, in both countries. The state-provided system is insufficient to assist the less privileged children, whom vocational education was thought to be introduced for.

Finally, the role of formal education for employment
should be noted in agencies as SENA in Colombia and SENAI and other programmes in Brazil. These training schemes did not have the same functions as those assigned to formal education, and their aims are strictly defined by the job market. Although these programmes also had received assistance from foreign sources, they were adjusted to the needs of the each specific country.

Thus the State in Brazil and Colombia generated educational reforms but did not fully implement the vocational programmes. As a consequence, there were successive changes in legislation to allow alternative types of provision of secondary education. For that reason, the State in Brazil was openly displaced in the management of the reform through private initiative and private system, which also was involved in teacher-training for vocational curricula [12]. The increased dissatisfaction and criticism from both private and state school systems produced the final exclusion of a compulsory vocational curriculum from that level in Brazil.

But now, as a consequence, instead of one secondary school system in Brazil and in Colombia, there are different types and degrees of secondary education; and the planners' ideas about vocational education have never been completely implemented in either of the two countries, not least because vocational educational reforms suffered pervasive obstacles even from inside the governments. There was little real financial and political support to
implement vocational education programmes in spite of foreign assistance and governmental rhetoric.

The ideologization of vocational education

The third issue this section will deal with is how vocational education programmes served as an ideological tool for both countries; with vocational education helping the governments to disguise increasing socio-economic inequalities brought about by dependent development. These reforms were useful to governments which had to face an extraordinary demand for more and better schools at the basic levels.

Vocational education served to alleviate demands for higher education, from the urban middle strata; it served to provide an alternative for urban masses looking for secondary education; and it served to attract foreign resources. In Brazil, during a period of growing social inequalities, produced by the economic model of development adopted, vocational education was seen as a means to alleviate the demand for secondary education from the less privileged classes. More broadly, in Colombia, the first preoccupation of the government was with urban and rural primary education, to avoid the repetition of mass unrest.
Provision of secondary and higher levels of education was left to private sector.

In contrast, the planners were interested in more practical and vocational education to the extent it could help solve the immediate need for skilled workers.

In Brazil, only one reform succeeded: the reform of higher education. The amount of resources and management allocated to this level were carefully provided. At that stage, the economy demanded mainly higher level technicians to operate the modern enterprises and multinational corporations. Secondary school vocationalization, however, ended up as a failure. Access to secondary school remained restricted almost to the few who can pay for it.

5.4- Vocational Education: lessons to be learned

The purpose of this subsection is to discuss the outcomes of the introduction of vocational education in Brazil and Colombia in the 1970s in the light of the political rationale that framed the adoption of educational reforms in dependent societies.

The restructuring and re-orientation of the State's priorities within the dependent development model did not imply any modification of social structure but served to maintain the status quo, while economic growth occurred.
Programmes under the label of "education for development" became a means of social control especially at university level in Brazil, and through vocational programmes such as SENA and INEM in Colombia.

Nevertheless, vocational education programmes received a different amount of attention in each country. In Colombia, there is an effort to improve training programmes as a means to improve social mobility. This function was stressed not only by the politicians but also by planners. However, even if institutions like SENA or INEMs should not only train for work or for the job market, but also open new educational opportunities by offering schooling to the urban masses, the number of these schools are far from covering the needs of that population. Secondary school reform in 1975 and 1978 should have provided new opportunities for youngsters not assisted by the vocational-orientated programmes.

In comparison, in Brazil, SENAI has prepared and trained the workers needed by specific industries. This has been done satisfactorily. The programme, however, was never intended to cover demands for formal schooling and its clientele is overwhelmingly blue collar looking for blue collar occupations [13].

However, industry at the moment when the vocational reforms occurred during the 1970s, was not in as much need of occupational training as when SENAI and SENA were first
established in Brazil and later in Colombia. At the time when vocational reforms were introduced, industries had become more sophisticated, by the transference of technology through multinational conglomerates established in these countries. The kind of training which was required then was a very specific one. This could be provided by specialized institutions and further attempts in fact were made, to bring the schools and enterprises closer together through co-operative programmes.

However, by the time compulsory vocational education was being adopted in Brazil, there is very little evidence that training for specific jobs was being demanded from industries. It has been pointed out in the thesis that historically demand for training is a consequence of a particular stage of industrialization. During periods of fast growth in manufacturing, of changes in the productive apparatus, or when the industries are first established, the workers must be quickly trained. But in later stages of development the need is more for re-training than for always increasing the number of skilled workers [14].

There was, indeed, scepticism over the introduction of the vocationalization of secondary school in Brazil through Law 5692. This curricular change was not demanded by most the employers, who already had the SENAI schools, nor by the prospective employees, who wanted the secondary school
to allow them to pursue their studies instead of going to a factory job.

In Brazil different groups for different reasons were disaffected by that change: the SENAI scheme had its specific clientele, which strongly values the straightforward prospect of employment that this kind of training provides; middle and upper class parents did not wish their children to go to vocational education instead of academic courses; the lower middle classes also shared the generalised prejudice towards manual-technical professions.

All these factors contributed to the vocational education reforms being unwanted. While Colombia built two parallel systems of training, which also provided education for the lower urban strata, in Brazil vocational education for all secondary school pupils became a failure.

Education and training did not fit easily together in Brazil's public secondary school system. Other programmes were created outside the formal system to provide some kind of training for work. The well-off children, meanwhile, were going to academic courses in private schools. The poorest pupils went to poorly equipped secondary schools, which by no means gave them a satisfactory job preparation. After 1971-72, public secondary education in Brazil has been simultaneously non-academic and non-vocational, and a rather poor mixture of courses. The balance and
predominance of each of type of curricula, depended on the circumstances of each school.

There was however a positive consequence of this amorphousness: the emergence of criticisms. The first reaction was against vocational education itself. This reaction came about because of the frustration of those who had waited for a more democratic access to traditional secondary school. The second was the reaction from the intellectuals, who argued about the fallacy of an specific form of education for the labour market and for an individual's specific employment. These disatisfactions and criticisms opened the opportunity of a wider discussion, over and above the justifications of such policies and their (lack of) implementation [15].

Vocational Education in Brazil and Colombia

Overall, it has been argued that:

A) Vocational education programmes were introduced in Brazil and Colombia with the double purpose of helping the achievement of economic development and also as a means to socialize and educate the youth in accordance with this new model of development.

B) The introduction of vocational education reforms was related to economic expansion in the two countries led by
implementation, both in Brazil and in Colombia.

G) Criticisms of vocational education reforms have underplayed their role as an ideological instrument for governments wanting to disguise social inequalities.

However, these conclusions, even if they are new in terms of the existing literature, and even if they are based in a more delicate and complex analysis (in terms of the triangular patterns of relationships between the international arena, local socio-economic structures, and State formations), than has hitherto been offered, do not answer the question: **how might vocational education succeed in dependent societies?**

The earlier argumentation in this thesis has located the very great difficulties in implementing a meaningful vocational education programme in Brazil and Colombia in the seventies. The failure of vocational education in the cases studied here emphasises the need for more coherence in purpose and more efficiency in implementation from governments, if the objective is general educational change.

This thesis has also shown the incapacity of dependent societies to pursue their own policies in order to meet the needs of the under-privileged classes. During the period examined in this thesis, the governments in Brazil and
Colombia were constrained by their dependence on external sources of capital and external assistance to educational programmes: those interests collided with local non-elite interests.

Furthermore dependent societies have now become aware of their dependency. They have started to question the policies borrowed by their governments. But that is not the same thing as being clear about how to reconceptualize the problem.

In that reconceptualization, the first step is to note the need, in thinking about vocational education, to go beyond educational planning techniques, and to stress the complex historical conditions, which might or might not allow the success of reforms leading to vocational education. The economic rationale, the economist philosophy, for large scale vocational-training programmes paradoxically prevented the institutionalization of such programmes, which were conceived to help economic development: "industry under capital does not have any need of schools for the reproduction of labour" [15].

Secondly, it is important to note the tension between the idea of education as an intended agent of national economic development, and the framing of the specifics of this by different class demands for social stability or social mobility. People will use, and will ideologize, the education system for their own purposes, and what is a
"better school" from one class perspective, will be a "poor school" from another. Thus "vocational education" was rejected by both class extremes in Brazil and in Colombia, for their own children. The working class wanted an expansion of the basic, main-stream schooling system, the middle classes wanted better quality academic high schools.

Thirdly, it should be noted that educational reform in Brazil and Colombia has been easier in times of economic expansion; at the moment, vocational education programmes and educational reform are expected to find a solution for unemployment - which is to ask a great deal of the educational system.

Fourthly, the role of the state is important and, it has been suggested, this role interrupts the simple economic determinism of early dependency theories. It is more useful to perceive the State as the mediator between the social classes and the productive sector, and the State itself as a social actor to explain the complex dynamics of educational reforms. Nevertheless, the State is an important social actor. In Brazil, the State not only actively borrowed foreign educational models; it actively discouraged criticism and alternative educational programmes. Major new initiatives in the educational sector only become possible after the "abertura" (opening up) of the military regime in 1979.
The fifth point is, then, that the State's views may, in certain circumstances be challenged, and that debate is important in reconceptualizing vocational education. At the moment in Brazil, new forms of non-formal education are being suggested by social movements in urban deprived areas, and thus the monolithic system of formal education is being challenged.

However, sixthly, in thinking about the future of vocational education, it is important to notice that earlier reforms have left a residue - which now is a fresh ingredient in the problem. Dismantled and unrecognizable, the earlier technical schools and the normal public secondary schools, have not recovered. The academic curriculum remains the ultimate choice of parents and children. However, the situation is less extreme in Colombia where secondary schools, with a more prestigious academic curriculum, have remained unchallenged by the INEMs, although the vocational schemes apparently received more social approval in Colombia than the vocational education reform in Brazil.

Seventhly, in reconstructing vocational education, it should be noted that the planners are discredited. When the reformist era of the 1970s ended, it also put an end to the planners' powerful role within governments. Participation became the new principle adopted by those who were in tune
with the increased awareness of their rights by the less privileged classes.

There is also room now for the insertion of a different kind of discourse: from educationists about pedagogy, about epistemology, and about the social role and responsibilities of education within other social policies (such as health care, housing, and so on).

Eighthly, it is suggested that the particular dependency framework which informed this thesis has two main virtues: it forces and encourages contextualization of the historical dimension of recent events (as compared with economic planning models); and it insists on the significance of local needs, local conflicts and local social structures which cannot be overridden by universalist plans from international agencies. External insertion of vocational education into local contexts is likely to produce poor results, as this thesis has tried to demonstrate.

What now needs further clarification - as the structures of dependent development continue to exist for Latin America - is, at the macro-level, which theory of development will replace the economic theories that framed so much of the modernization efforts of the 1960s and 1970s at the policy level; and at the micro-level, the question of revitalizing and providing structural opportunities for the emergence of new educational and pedagogic theorizing
about vocational education on the local level - within the general aspiration, still far from achievement, that a modern general system of compulsory secondary education should be provided free by the State, in these societies. Furthermore it should be noted that Brazil and Colombia recently draft policies place secondary education together with technological education and stress the need for a new kind of vocationalization.

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