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# Formal Education and Economic Development

## Abstract

To what extent can a society's formal education system fulfill economic development needs? What levels, forms, and types of formal education contribute to a society's need to enhance economic development? As society seeks to readdress its need for economic revitalization, these questions are raised to the forefront of the education and political process. This article takes the position that formal education is not the sole factor in fulfilling economic development needs. The role of formal education needs to be more closely examined to determine appropriate "partnerships" between education and society.

## Introduction

Concern about the nation's competitiveness in international markets and the productivity of North American workers in the labour force has led to new initiatives for improving the quality of education being required at all levels of formal education and especially of the secondary and post-secondary levels. Specific relationships between the functions of formal education and the need of enhancing economic development are being realized and are taking a variety of forms ranging from industrial partnerships in incubator settings to greater emphasis on basic learning. In academic circles it is widely accepted that an educated population contributes to the economic development of society as well as to the well being of individuals within that society. It is also recognized that a society's economic structure influences the need for human capital investment. The extent to which the supply

and demand of an educated population interacts with and influences economic development is a topic of concern in developed as well as developing countries facing the need to provide more concerted efforts to improve the quality of life for and social well-being of their citizenries. Economic development, defined in terms of per capita gross national product, involves the monetization of economics and the emergence of new economic systems reflected in occupations and income.

### **Formal education**

It is a simple fact that formal post-secondary education is not the sole factor in shaping and directing economic improvements (Carnevale, 1983); in fact, research has not been able to document a causal relationship between formal education and economic development. Educational attainment and per capita income may be more the result of economic development than of formal education (Squire, 1981). The question is therefore not so much whether formal post-secondary education contributes to economic development, but rather **how much** and **in what forms** does it contribute to economic development? In its role as that body of a country's institutions that provide a structured and chronologically ordered education for the public good, formal post-secondary education is both determined by society and is a determinant of society when based on other factors that contribute to the mobilization of human resources. Furthermore, the role of formal post-secondary education and its influence on economic development is uneven and varies between developmental stages.

Other major factors need to be analyzed and interpreted to define their level of influence in raising society's general standard of living. A variety of factors operating at different levels may be viewed from the perspective of the individual, region, nation, and relationships among countries (Little, 1984). At the individual level, significant factors include work attitudes, achievement motivation, social status, work expectations, family background, and sex. Referred to as the "social demand" for education, personal advancement, stemming in part from family expectations, especially in developing countries, creates a demand for formal education degrees which is frequently difficult to fulfill by their respective countries.

Taxation, political structure and policies, land ownership, banking practices and laws, and income distribution are important parameters in examining some of the additional factors influencing economic development at the regional and national levels. Economic development issues between countries with regard to trade agreements, technology transfer from multi-national corporations, exchange-rate levels, or access to development assistance are also influential factors which must be considered.

A country's formal post-secondary educational system is socially useful because it fulfills certain functions for society. In assessing educational value, most countries must measure the benefits of educational expenditures in terms of private (individual) and public (social) return on overall social productivity and livelihood. One of the fundamental policy issues is the need to assess the benefits of education in order to allocate resources not only among various educational institutions at all levels, but also between the educational sector versus all other social programs. If social benefits are substantial, justification can be made, but if the benefits accrue to the individual only, self-financing is traditionally required.

The importance of these considerations is apparent in that society often helps to establish public and private social institutions in order to serve its people better and fulfill its collective goals. These institutions are required to play certain roles in society which can be seen in the established goals of the institutions. In most instances, social institutions can be defined by what is "expected" of them in order to enhance the quality of life by fulfilling the goals prescribed for them. Expectations need to be determined in relation to what is possible in order to avoid distortions in the allocation of resources. Recognition of what education can do and what it should do is necessary in analyzing expectations (Schultz, 1982). Society, through its multifaceted efforts, establishes institutions and programs to preserve and strengthen its purposes. It is the conventional belief of society that formal post-secondary education is an avenue by which those admitted can obtain ready access to the world of work in both the public and private sectors. This belief is frequently viewed in the form of a three-dimensional matrix whose dimensions are occupation, economic activity, and education.

The type, quality, skill level, and circumstances of formal post-secondary education offerings determine the degree of contribution to the economic and social development of society. The overriding issue is to what extent can post-secondary education and particular forms of education (formal and nonformal) contribute to economic development. How should resources be allocated between different levels of education (secondary and post-secondary), between general and specialized education, and between different types of post-secondary institutions and different methods of teaching?

There have been a number of alternatives to formal education to fulfill economic development needs. As Zymelman (1976) indicated, two basic methods included training on the job and a combination of on- and off-the-job training. It was in this latter area that employment literature has focused on relating formal and nonformal education sectors to each other into one delivery system rather than providing separate delivery systems. This interdependent approach has taken the form of

apprenticeships, training on the job with related formal post-secondary instruction, and cooperative work training. For the most part, however, the integrating of work experience into a formal/nonformal system of education has been approached in a disaggregated fashion and, thus, limiting capabilities to serve economic development needs. To be more effective, nonformal education schemes need to become more institutionalized to ensure appropriate learning.

### **Cost benefits**

The expenditure for public supported education relative to the types of learning offered, the access to educational programs after high school, and the means by which education interfaces with local and national economics is of major concern to most educational and political leaders. For some, even attempting to determine needed educational resources is inappropriate, because from their point of view, education is a priceless activity in which cost benefits cannot be measured. Nevertheless, resources are and always will be limited regardless of how society is organized and financed.

The sheer size of most educational budgets necessitates an economic assessment in conjunction with other forms of program reviews as to how resources are spent and deployed. Education is not a free activity; therefore, the allocation of resources for formal education competes with the allocation of resources for alternative means of regional and national economic development (Schultz, 1982). Education is an economic good and its value is due in part to its scarcity. From another perspective, society can have too much formal education whereby the cost for development may mean less resources for health, nutrition, clothes, and shelter (Fields, 1982). Educational value will differ according to the level of education achieved since a progressively smaller share of the population is able to attend each higher level of the educational system.

Economic criteria for evaluating the benefits of formal education and its effects on economic development have typically included the concepts of efficiency, equity, and employment (Psacharopoulos, 1980). Internal and external efficiency are measurements of the formal educational establishment. Internal efficiency refers to how economically resources present are used in the educational process. In other words, it is the level of "cost-effectiveness" in the formal education of students. External efficiency refers to the placement of graduates within society upon program completion or graduation.

The concept of equality, or access to the formal education structure, directly influences social, occupational, and geographic mobility. For both developed and developing countries, the level

of formal post-secondary education achieved is related to income distribution (Squire, 1981). The extent to which access to public supported formal education can be attained is an important factor in the overall economic development of society.

Employment criteria attempt to relate formal post-secondary education to labour supply and demand and not necessarily to those factors which influence the labour market. The availability of career planning, information services, labour exchanges, and job placement services is an important aspect of an effective formal post-secondary education structure. The concept of imparting specific employment skills through formal institutions at public expense is a controversial issue although the acquisition of such skills is important in the development of a labour force.

In allocating public funds, the question becomes how to identify, assess, measure, and evaluate the benefits of education to maximize the welfare of the people served by the economy. That is, what changes are affected by the formal educational experience? Basically, a greater understanding of educational benefits is needed in order to evaluate the educational process in terms of costs/benefits, resource allocation, and management effectiveness. Without some means of assessing and evaluating the benefits of education, the purpose of formal education will be diluted, and more importantly, policy decisions influencing the role of formal education will be made with limited reference to expectation and purpose.

### **Conclusion**

The degree to which the role of formal post-secondary education is viewed as an influential factor in economic development and the degree to which it is viewed as an integrated focus essential to all development efforts depend to a large extent on the nature and purpose of the learning structure (Haddad, 1985). Degree requirements, certifications, grade level achievements, standardized examinations, and admission qualifications are factors that can either facilitate or hinder the horizontal and vertical influence of post-secondary education in the development process. It is likely that such formal education structures are based upon societal perceptions and as such fulfill perceived needs. The very presence of a formal education structure in a society is in itself a reflection of what is needed for productive development.

Although public opinion in both developed and developing countries places a high value on the importance of formal post-secondary education in allocating resources for the quantitative and qualitative development of education, appropriate guidelines as to the degree of financial support and as to how each educational level contributes to development are limited.

There is little substantive research to give direction to policy leaders. Given that formal education and economic development are affected by the dynamic characteristics of society, a pressing issue for educational leaders is the need to determine what formal post-secondary education can and cannot realistically do to promote economic development (Fagerlind, 1983). Formal education is not directly consumer oriented, but is rather deliberately acquired to provide future services through an investment in people. The matching of education with economic needs relies on the intervention of society to regulate individual access to both education and occupations.

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