

Economics of Education

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Abstract

Economics of Education is the application of Economic principles, concepts and laws to the process of Education. Economics of education studies human behavior (in terms of human decisions), action(s) and reaction(s) about schooling. Economics of education is relatively a new branch of study into the academic discipline. Though the subject economics of education had been reported by the economists long back, but it received familiarity as a discipline only in the mid of 20th century. So as a young discipline, the nature of economics of education is varied. As we are aware that the Economics of Education enable us to understand theeconomic problems of education and their remedies. It is also enable us to utilize our limited educational resources in such manner to achieve our educational goals and objectives. So that the Economics of Education can help us to solve the problems.

Key Words : Economics, education, Subject.

1.1 Introduction

Economics is a social science that studies how society chooses to allocate its scarce resources, which have alternative uses, to provide goods and services for present and future consumption. Economics as a social science subject concerns itself with making choices and finding alternatives. It studies how society decides what, how and for whom to produce goods and services. Robbins defined Economics as a social science subject that studies human behavior as a relationship between ends and scarce means which have alternative uses.

1.2 Concept of Economics of Education

Economics of Education as an area of study cannot be said to be a separate field of inquiry that is totally different from the ordinary economics. Economics of Education is the application of Economic principles, concepts and laws to the process of Education. Economics of education studies human behavior (in terms of human decisions), action(s) and reaction(s) about schooling (Babalola, 2003).

It further looks into how human behavior affects economic development. Economics of education is one of the branches of ordinary economics, though, it is the study of how educational managers make official or approved choices from scarce available resources which is meant for the realization of the best possible educational outcomes. Economics of Education employs the use of some elementary concepts commonly used in labor economics, public sector economics, welfare economics, growth theory and development economics. World known classical economists like Adam Smith, Alfred Marshall, John Stuart Mill had discussed education and development extensively, advocating for public investment in education. So, by the 1950s, economists gave attention to issues such as the relationship between education and economic growth; relationship between education and income distribution and also the financing of education. Economists analyze the production of education in this world where resources such as the capital invested in buildings or technology and the labor of the teacher workforce are necessarily scarce. This scarcity of resources means that policymakers must decide:

1. How much to spend on each stage of education (i.e. what to produce);
2. How to provide educational services in a way that maximizes its benefits to society (i.e. how to produce education); and
3. Who should have access to each stage of education (i.e. for whom is education provided?)

There are three decision makers or stakeholders in the educational system. These are:

- (1) The society;
- (2) The institutions or providers (suppliers) of education and

(3) Individual or households (purchasers of educational services).

The twin problem of scarcity and choice face these major stakeholders. The fundamental problem of economics of education is how the society, institution and the households make use of the limited human and material resources they have, to best satisfy their unlimited wants for education. The solution to the fundamental problem requires the application of certain economic concepts which we shall deal with in this course.

1.3 Educational Resources are Limited

Resources: such as men, money, materials are limited in supply and serve as input into the educational system. These inputs include:

1. Men (M): teachers, policy makers, non-teaching staff;
2. Materials (M): students (raw materials), teaching and research materials, teaching aids and other equipment;
3. Money (M): cash, cheque and notes;
4. Management (M): policies, plans, programs, time table and educational laws;
5. Time.

One noticeable characteristics of resources in education is that they are not always enough, knowing fully well that the education industry is a Centre for production of educated manpower, who are invariably injected into the economy of different nations. For example, there is 24 hours in a day and as an undergraduate student; in the Department of Educational Management you offer courses in Department of Teacher education, Special education, Guidance and Counseling, General Studies plus courses in other faculties outside education.

We will discover that in the process of our academic work, we will have so many assignments, tests and personal issues to attend to each of the days, but we will find out that the 24 hours in a day will not be enough, and you may be tempted to ask God to increase the length of the day. This is an example of how time, which is an input can be limiting. Economics of education is therefore concerned with the problem of economizing all available required resources.

1.4 Educational Wants are Unlimited

Hardwick, Khan and Langmead (1994) affirmed that individual wants are virtually unlimited, whilst the resources available to satisfy those wants are scarce. Educational wants create a demand for scarce resources, and this implies that wants are competing for the same resources. If the above happens, it is therefore rational to conclude that wants that are most pressing will be satisfied first under direct competition. Really, it is not possible to satisfy all identified educational wants at the same time, because educational resources are limited. To this end, decision makers will have to make choices among the alternative educational wants. Consequently, economics of education concerns itself with how to use the limited educational resources to satisfy the unlimited educational wants.

The study of economics of education includes private and social rates of returns to education, human capital and signaling theories of education, non-pecuniary benefits of education, education and economic development, contribution of education to the economy, measuring educational expenditure, manpower planning, educational planning and human resource development, educational cost, cost analysis, educational production, educational effectiveness and efficiency, costs-efficiency and cost-effectiveness, cost-benefit analysis and economics of teacher supply, educational and equity.

On the basis of above description we can conclude that:

1. Economics of education is a branch of economics which uses economic tools to solve educational problems and tackle educational issues.
2. The difference between economics of education and ordinary economics is the dominance of education as a variable in every argument and application of economic principles, laws, and concepts to education issues.
3. Economics of education is the study of how educational managers make choices concerning the use of the scarce educational resources, and this is what economists do in the education system disposal to best satisfy their unlimited educational wants.

1.5 Nature of Economics of Education (According to Devasis Chakma, 2019)

Economics of education is relatively a new branch of study into the academic discipline. Though the subject economics of education had been reported by the economists long back, but it received familiarity

as a discipline only in the mid of 20th century. So as a young discipline, the nature of economics of education is varied. The nature of economics of education can describes into the following points:

- **Scientific discipline**

The focus of economics of education is to optimum use of educational resources, tools and techniques to achieve the educational objectives. Thus the economics of education is a science of allocating scarce educational resources among competing alternatives to education in order to achieve its goals. It is the science that deals withrationalization of scarce educational resources to achieve optimal goals of education.

- **Applied subject**

Economics of education applies the theories and principles of economics to the fieldof education. The main function of economics of education is to address the issues of resource allocation and distribution to achieve the objectives of education.

- **New and emerging branch of education**

Economics of education relatively a new and emerging branch of education. It evolves as a separate branch of study only in the mid of twentieth century.

- **Dynamic content areas**

The subject matter of economics of education is very dynamic. The new ideas are continuously added to the subject matter of economics of education. It encourages the extensive research studies to expand its content areas.

- **Systematic body of knowledge**

Economics of education is a systematic body of knowledge. It is the byproduct of extensive research studies in economics rather than the spontaneous recognition of the economic dimensions of education.

- **Interdisciplinary in nature**

Economics of education is interdisciplinary in its nature. The subject matters of economics of education are related to education, economics, mathematics, government system, management etc. It is seen that the content of economics of education are interrelated.

From the above points you can easily realize the nature of economics of education. As a new discipline economics of education got its identity during 1950s. Many renowned economists like Adam Smith, Alfred marshal and J.S. Mill spoke many things about public investment on education, rate of return of education, human capital formation etc. during eighteenth and nineteenth century. But only by 1950s, economists start emphasis on education and its relationship with other factors like economic growth, income distribution, educational finance etc. Today economics of education stood as a separate and individual discipline having its own identity. Dearstudents, the changing nature of economics of education can be verified with its content areas.

- **Scope of Economics of Education (According to Devasis Chakma, 2019)**

As you know that the word scope refers to the length and breadth of a subject. In thispart we are going to learn the subject matter included in economics of education. Scope of Economics of Education is wide and dynamic. The subject matters of Economics of Education are drawn from both the Economics and Education disciplines. Basically the study of economics of education includes private and social rate of returns to education, human capital formation, relation between education and economic development, educational cost and benefits, educational planning, efficiency of education, cost effectiveness of education, education and equity etc. These are the essential areas to be included in economics of education. According toHanson the subject matter of economics of education falls into seven categories as follows-

- Human capital formation.
- Education's contribution to economic growth.
- Impact of education on earning.
- Historical analysis of economics of education.
- Relationship between education and earning.
- Programme budgeting and financing of education.
- Efficiency and equality of education as opportunity.

Considering the above categories, we can further elaborate the scope of economics of education under the following points.

1. Educational Cost

Educational cost is the major area of study of economics of education. The quality of education is highly influenced by the cost incurred on a particular level of education. Babalola in his definition refers to educational cost as a measure of what a student, an institution or the government has to give up in order educating an individual or a group of individuals. Educational cost is the monetary as well as non-monetary values used up in the process of educating an individual or a group of individual. The subject matter of economics of education is incomplete without proper discussion of educational cost and its taxonomy.

2. Funding pattern of Education

The financing pattern of different levels of education is another major area of study of economics of education. The balance growth of education is highly dependent on the healthy educational finance. Economics of education suggests the effective ways of financing education.

3. Educational Planning

Educational Planning refers to the application of rational, systematic analysis to the process of educational development with aim of making education more effective and efficient in responding to the needs and goals of its students and society. It is a system based exercise directed towards achieving certain physical targets and objectives set by a society within certain time frame in education sector. Educational planning is an important subject matter of economics of education. The details of educational planning is studied in economics of education extensively.

4. Human capital formation

Another vital area of economics of education is the Human capital formation and its theoretical approach. Human capital refers to the stock of productive skills and technical knowledge embodied in human beings (labour) through education and training. It is regarded as the knowledge, expertise and productive capacities that a person acquired through educational training and which enable him/her function effectively and efficiently in the society.

It includes the knowledge, skills, competences, and attributes embodied in individuals that facilitated the creation of social welfare.

5. Investment in Education

Investment in education is another important subject matter of economics of education. In the words of Lucy "Investment is the process of postponing immediate consumption in the expectation of greater consumption in the future". The investment theory in education posits that government or individuals should invest in educational projects with greater utility or highest rate of returns. Theoretical framework of Investment in education has occupied an important place in economics of education.

6. Cost benefit analysis (CBA) of Education

This is another concerned area of economics of education. CBA emphasizes a systematic comparison of the magnitude of the cost and benefits of some forms of educational investment in order to determine the economic profitability of such investment. It provides a rational model for investment decision making in education by relating the profitability of investment in one sector of the education enterprise to the other, or between various levels and types of education, such as vocational, professional, technical or general education. This content occupies an important place in economics of education as it guides the investment decisions in right direction.

7. Rate of return in education

Returns to investment in education are the benefits derived by educational consumers as a result of their investments in education. The return of education can be of two types. These are private rate of return and social rate of return. By private rate of return we mean those benefits accrued to individuals at the end of schooling as a result of investment in education. The benefits derived by the government or society for an educational investment project is referred as social rate of return. Researchers have been conducted large number of research on rate of return of different levels of education, which ultimately enhances the scope of Economics of education.

8. Efficiencies in education and signaling theories: Another concerned subject matter of economics of education is efficiencies of education and the impact of signaling theories. Efficiency in education generally refers to the capacity of an educational system to turn its products (students) out with minimum wastage. In other words, it refers to the ability of an educational system to achieve the desired output with a minimum application of inputs or resources. Efficiency in education can be internal and external.

9. Relationship of education and economic development

Economics of education also discusses about the relationship between educational achievements and economic development. There is a direct relation between these two elements. Economic development can only be achieved with higher educational achievement, and in the reverse way, educational development is not possible without economic enhancement. In this way, both economic development and education and complementary to each other.

10. Demand and supply of education

The growth of education is highly influenced by the demand and supply factor of education. The demand for education is a function of price, utility and the ability of government and people to pay for it. On the other hand supply of education refers to the function of the fiscal strength of the government and private educational investors as well as the utility of education to the society. So, the balance between demand and supply of education is needed for balanced growth of education.

11. Education and labor market

The linkage between education sector and industry is a major concern area of economics of education. Economics of education studies how education can create efficient and skill-full human resources to increase the productivity of labor force. Education has to be designed in such a way, as it cater the demand of labor market.

12. Management of educational finance

Economics of education has to give a focus on the ways of managing educational finance at government as well as institution level. It should develop efficient and effective procedure of managing finance in educational institutions.

1.6 Emergence of Economics of Education

Economics has an important role to play in the development of economics and democratic ideals. The teaching profession has developed mainly since the early 1800's, when teacher training schools became popular in Western Europe. Before then education, its planning and financing received very little attention.

According to the New Encyclopedia Britannica (1985)

“Measured in terms of its members, teaching is the world's biggest profession.”

As the human development has taken place the growth in Education system was also noticeable. The need was felt that if human resource is to be utilized to the optimum, the planning of economics of education and its financing cannot be neglected. So the new branch of economics under the main head of education with the name 'Economics of Education' was born 1960's. Nearly fifty years ago when researches started taking interest in this new field there appeared to be a near unanimous welcome by economists to this new dimension of India's progress. But a majority of contributors in the discipline of education received it with a feeling of discomfort and resentment.

The major reason of this discomfort was firstly that: First in India basic education to masses is the responsibility of Government. Secondly they opined that Economics of Education may increase the differences between haves and have not. These feelings of elation and distress are both quite justifiable. In 1963, T.W. Schultz, one of the pioneers of economics of education concisely summarized the then prevailing view point. Those who value schooling highly which includes most of those who are a part of the educational establishment are likely to look upon an effect such as this as an intrusion which can only debase the cultural purpose of education. In this view education lies beyond the economics calculus, because they believed that education is much more than a matter of costs and returns. Though the great founder of modern economics, Adam Smith, in his book “An enquiry into the nature and cause of wealth of Nations” published in 1776, placed great stress on education, yet economics of education and investment remained one of the neglected subjects in the science of education.

The conceptualization of economics of education has undergone noteworthy changes. India is neither economically advanced nor educationally advanced. Over a period of time as the economic development in the country has taken place the educational development also was exhibited. “The education has become major source of skills and trained talent. Indeed, from one point of view, this is education's critical economic role.”

The process of development in the Country is determined by a harmonious functioning of the triangular of economy, education and polity. Education is conceived as a critical participant of a triangular relationship and its process which cumulatively leads to change, development and progress in a society in a planned

manner.

The economy, education and polity of a country in the modern world are on the one hand, powerful instruments of power with tremendous potential, both positive and negative. On the other hand, they are extremely potent tools for the development of the people provided they are utilized to the maximum. This means each of three sides of the triangle themselves relate itself positively, with the other two sides of the triangle for the appropriate development.

In the opinion of the committee on Educational Planning and Administration and Evaluation in the Fourth – Fifth year plan presided over by Mr. J. P. Naik Adviser, Ministry of Education, Government of India : “The First” important reform needed was preparation of a comprehensive plan which should deal into merely with the allocation of the resources provided by the Central and State Government to different sectors of education and within a given sector but different types of programs but also with the present educational situations, education objectives in view and the programs proposed to realize these objectives. It should thus cover planned as well as Non-planned programs that involve finance and those that do not and also programs for better utilization of existing facilities and economizing expenditure. The linkage with programs of social and economic development should be much closer than at present.” On the basis of the resources that are likely to be available, three questions are posed:

- (1) What type of education can the country afford?
- (2) How much or for whom?
- (3) What should be the priorities on available funds?

The policy approach must keep in consideration both, the educational consideration and financial constraints. So, economics of education is considered as the study of the allocation of resources among educational institutions and activities and of the returns obtained both by individuals and nations.

1.7 Need of Economics of Education

As economics deals with planning, financing and appropriate utilization of resources and basic education is the fundamental right to all in India; it becomes very essential to equate the available resources. The present time educationists as well researchers also endorsed the viewpoint of some of the economists of 1963, that economics of education is the need of the hour. Although some of the researchers have expressed their resentment and opposition that consideration of economics aspect of education would completely overshadow its other important dimensions, but majority of economists and educationists of our country are now prepared to accept the need and importance of the subject for the following specific reasons :

- 1. Rising Cost:** The proportion of national income spent on education has increased in the recent years.
- 2. Secondary Industries:** As individuals becomes richer the proportion of their income devoted to food and other basic necessities drop. The amount they spent on health, education etc. rises.
- 3. Technological Transformation:** The basis of the technological transformation of the world economy can be found in the accumulation of knowledge.
- 4. Health and productivity:** The low productivity of many workers in various countries is directly attributable to their poor physical state. This in turn depends to a considerable extent on the type of education that the workers receive.
- 5. Shortage of Skills:** It is a common belief that a shortage of skills holds back economic growth. An effective education plan must be based on the needs of skill manpower of all sorts. An unplanned system of education results in unemployed persons and deprives the nation of their contributions to the growth of national income. Thus the specialized role of manpower forecasting brings the economics of education into prominence.
- 6. Demand of Scarce Resource:** Education can be made cheap in the developing countries in the sense that there is a superabundance of manpower which can be harnessed very conveniently. Education thus makes limited demands on the scarcest resources of the country. The under developed countries are short of physical and sometimes of natural resources. This implies that the use of abundant supply of manpower and its endowment with skills is likely to be one of the major objectives of any program, planning, financing through the understanding of economics of education.
- 7. Extra ordinarily high monetary cost of education:** Education in the developing countries is most prominently poorly administered, lacking in planning and coordination. And one of the most striking features of education reform in the poor countries has been their extra – ordinarily high monetary cost. For the most efficient mobilization of country’s resources, it is paramount importance that the plans for the

development of economy and for developing human resources must be coordinated. Education cannot be left of the general plan. The neglect of education means overlooking the importance of an adequate supply of skill manpower and the efficient uses of resources in education. John Vaizey observes: “since education makes large demands on public funds about 20% of government expenditure in recently developed countries it is an important part of economic program, because of its cost alone. But it has also an important positive contribution to make to economic growth.”

1.8 Relevance of Economics of Education

As we are aware that the Economics of Education enable us to understand the economic problems of education and their remedies.

It is also enable us to utilize our limited educational resources in such manner to achieve our educational goals and objectives. So that the Economics of Education can help us to solve the following problems.

1. The Villagers do not send their children to primary schools despite the provision of free primary education. Failure of compulsory primary education program is largely due to the lack of proper responses from these people. This is because people know that opportunity cost of primary education is higher than that of other activities.

2. For the same reason of high opportunity cost of primary education the dropout rate of children of poor farmers is found to be higher.

3. High opportunity cost of education is one of the factors preventing from the full use of the concessions under prospective discriminatory measures in education, so far the scheduled caste and scheduled tribe people are concerned.

4. Since the various concessions and benefits of increasing education expenditure have been accruing to the richer than to the poorer people and since richer people are politically more influential, larger expenditures on education are made on higher education. It is for this reason that expenditure on higher education in our country has been increasing much faster than expenditure on school education. This is so because higher education by and large benefits the richer and upper income more than the poor and low income group people.

5. It is for the same reason expenditure on education in urban areas has been rising than in rural areas.

6. Expenditure of larger economics benefits from surer that employment and larger earnings – from education is the main reason for greater rush of students to professional colleges.

7. Since general school education is preferred for admission in colleges and since employment and earnings are less attractive for technical schooling there is overcrowding in general schools that in technical schools.

We have made the case that economists play a key role in the field of education research as a whole. Statisticians and researchers from other disciplines also undertake quantitative evaluation of education policy. However, the contribution of economists is distinct. Firstly, economists take a different theoretical perspective and therefore may be more focussed on incentives and other related issues, as well as trying to distinguish between the benefits and costs of education. Furthermore, from a methodological perspective, economists bring a different set of tools to bear on evaluations. For instance, it is increasingly recognised that random control trials (RCTs) are not possible in all circumstances and economists provide a range of methods that can be applied in a nonexperimental setting, as we outlined above.

Bibliography

- Dixit, A. (2002) Incentives and Organizations in the Public Sector, *Journal of Human Resources*, 37, 696-727.
- Dynarski, S. (2003) Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion, *American Economic Review*, 93, 279-88.
- Epple, D. and Romano, R. E. (2003), 'Neighbourhood schools, choice, and the distribution of educational benefits'. In C. M. Hoxby (ed.), *The Economics of School Choice*. Chicago: University of Chicago Press.
- Gibbons, S., S. Machin and O. Silva (2008) Choice, Competition and Pupil Achievement, *Journal of the European Economic Association*, 6, 912-47.
- Gray, J., H. Goldstein and D. Jesson (1996) Changes and improvements in schools' effectiveness: trends over five years, *Research Papers in Education*. 11, 35-51.
- Spence, M. (1973) Job Market Signalling, *Quarterly Journal of Economics*, 87, 355-374. Teixeira, P. (2001) *The Economics of Education: An Exploratory Portrait, History of Political Economy, Annual Supplement*, 257-287.
- Thomas, S. (2007) Modelling patterns of improvement over time: value added trends in English secondary school performance across ten cohorts, *Oxford Review of Education*. 33, 261-295.