



Relevance Of Education To Economic Growth

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Abstract: Education is an important human capital investment that supports economic growth and development. Education is widely recognized as a fundamental driver of national development. Investments in education, from primary to tertiary levels, improve individuals' skills, knowledge, and productivity, resulting in increased economic production and productivity. This study emphasizes the various ways that education promotes economic growth. Educated people have higher employment and earning potential, which helps to minimize poverty and inequality in income. According to the report, education supports entrepreneurship, creativity, and technical improvement, all of which are necessary for long-term economic progress. Education also has an important role in the development of vital institutions, governance, and social welfare systems that are necessary for economic growth. It was argued that, while education alone cannot revolutionize an economy, it is an essential component of effective economic policies. Macroeconomic stability, infrastructure development, and openness to trade and investment all contribute to growth. Importantly, the extent to which growth lowers poverty is determined by the poor's ability to participate in and profit from the economic process, emphasizing the need of equitable educational access. The study concluded that investing in quality education at all levels is critical for generating long-term economic growth, especially in emerging countries. Policymakers must promote education as a major tool for decreasing poverty, enhancing social welfare, and promoting long-term prosperity.

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1. Introduction

Generally speaking, investing in education is seen as an investment in human capital that will pay off in the form of improved and expanding national economies. Investment in education benefits the individual, society and the world as a whole. Maternal health improves, work prospects expand, and income levels rise with education. As a result, there is strong evidence linking education to development, making education a crucial indicator of progress. Investments in education have been acknowledged as a means through which an individual can escape from poverty (Ifionu & Ntncgah, 2013). It is an important factor for boosting a country's economy and also considered as necessary condition to achieve better outcomes on social welfare. The relevance of education to economic growth has been extensively studied and recognized by scholars and economists worldwide as their connection helps to boost individual productivity which contribute to the gross domestic product (GDP) of the economy.

The most effective strategy for lowering poverty and raising living standards in developing nations is economic expansion. Positive cycles of opportunity and wealth can result from growth. This might result in the formation of a sizable and expanding group of business owners and job creators, which would put pressure on the government to enhance governance. Thus, rapid economic expansion fosters human development, which in turn fuels economic expansion. Conversely, similar growth rates can have drastically different impacts on poverty, impoverished people's work opportunities, and more general measures of human development depending on the circumstances (Sparreboom & Staneva, 2014). The degree to which the impoverished engage in growth and receive a portion of its benefits determines how much poverty is reduced by growth. As a result, growth's pattern and pace are important factors in lowering poverty and are all products of the information and abilities gained by training and education. Thus, promoting quick and steady economic growth must be at the heart of any effective strategy for reducing poverty.

These strategies must reflect a combination of growth promoting policies, a friendly environment that improves the management of resources to make labour markets work better, remove gender inequalities and increase financial inclusion. **From the human capital theory as proposed by Nobel laureate Gary Becker, education enhances an individual's skills, knowledge, and productivity, leading to higher economic output (Becker, 1964).** Education is a key component of transition programs because it gives human resources the information, abilities, and skills they need to be productive and useful contributors to the country's overall development. As seen in many of the world's developed nations today, education improves people's self-awareness, increases productivity and creativity, fosters entrepreneurship and technological advancement, raises people's level of creativity, improves their quality of life, and has a wide range positive social effect on both individuals and society.

The purpose of funding public education is to develop the knowledge, abilities, and mindsets required for increased growth and productivity. The amount of resources invested and the effectiveness with which the inputs are managed will determine whether or not such growth is realized (Nwafor & Emeni, 2017). Over the past century, several European countries, including the United States and Japan, have had persistent economic expansion. This growth has enabled them to address issues such as extreme poverty and hunger, high rates of unemployment, rising per capita income, and increased levels of literacy. Thus, significant investments in worker capacity building and a more educated labor force have been credited with driving growth in per capita income and economic output. The rationale behind investing in education is that, in many nations, the educated earn more than the uneducated, and that a person's earning potential is a good indicator of their level of productivity. Earning power does not always correspond to productivity due to differences in job types, work environments, employment requirements, and job descriptions.

Furthermore, as productivity levels of humans are correlated with economic development, higher levels of education are positively correlated with economic growth and development. Nevertheless, the levels of income inequality are important in determining how powerful education influence growth and how growth reduce poverty, income and asset inequality and unemployment. For instance, economic growth generates job opportunities and hence stronger demand for labour, the sole asset of the poor (Bhattarai & Shrestha, 2015). So, an increase employment has the tendency of delivering higher growth which supposed to mean that the majority of the working-age population are now in employment due to the fact that education have prepared them for such opportunities. However, macroeconomic variables like low labor taxes, export-oriented policies, and low inflation influence the amount of jobs generated by growth. Additionally crucial are structural elements including the economy's distribution of manufacturing, services, and agriculture (Grant, 2017). Growth and employment continue to have

a strong positive association, although the strength of the relationship can be attributed to education and training.

It could be argued that, in contrast to places where there aren't many educated people, in an organized country where education is valued and educated people are recognized and treated as economic drivers, their knowledge is expected to be channeled into practical actions that would lead to the development of the economy. In other words, a country's economy can grow more productive when the percentage of workers with an education rises and they have the ability to perform activities requiring reading and critical thinking with efficiency.

General Overview of the Synergy that exist between Education and Economic Growth

Because reading and writing are the primary means of obtaining most information and improving communication, education at all levels helps people become literate. Therefore, one loses out on a great deal of knowledge when they lack writing and communication skills. Education is crucial for employment since it opens doors to a respectable living and helps many impoverished individuals improve their lot in life. On the other hand, those without education are likely to have a very difficult time finding work and creating new jobs. People become more sophisticated, mature, and knowledgeable as a result of education, which also imparts the technical know-how and skills required for better application of cutting-edge concepts and technologies. Therefore, it would probably be challenging to operate current machinery in particular conditions without education. Without a significant investment in human capital, no country has achieved sustained economic growth (Kuwar, 2021).

However, education by itself is not sufficient to change an economy; other significant factors that affect economic success include the amount and caliber of both domestic and international investment as well as the overall political climate. Yet these variables are influenced by the state of human development. Thus, the education of managers and policymakers will inevitably have an impact on the caliber of investment decisions and policymaking. In terms of the economy, a system with a greater supply of human capital is likely to see a larger amount of investment from both domestic and foreign sources (Kuwar, 2021). It is impossible to overstate the connection between education and economic expansion since it has the potential to imbue individuals with a richness of information that supports economic expansion. Investments in education are considered to be investments in human capital, with the hope that they can boost and expand a country's economy. xxxxxxxx

When someone enrolls in a course at a school, for example, they will go through a series of training sessions, exams, and other forms of theoretical and practical instruction designed to help them improve their knowledge and abilities. After completing this official training, the person will contribute to the growth of the economy by applying the knowledge and abilities acquired to a variety of projects. They may even identify new avenues for generating wealth, which will provide economic benefits (Barro, 2001). An essential component of a system's ability to successfully absorb foreign technology is its educational system, which is one of the primary determinants of the composition and growth of a nation's output and exports. Health and nutrition, as well as primary and secondary education, all contribute to increased worker productivity, both in urban and rural areas. Vocational education in particular helps students acquire skills and managerial abilities. Tertiary education helps advance basic science, responsible import selection, and homegrown technological adaptation and development.

In addition, secondary and postsecondary education plays a crucial role in the formation of important institutions such as the legal system, government, and financial sector, all of which are necessary for economic expansion. Locally made items by people with education-based skills and knowledge also increase a country's GDP, leading to economic growth and advancement. A knowledge-based economy is one where employers view education as a competitive advantage (Grant, 2017). Education encourages entrepreneurship, technical advancements, and increases people's productivity and creativity. Furthermore, it is essential for maintaining social and

economic advancement as well as for enhancing income distribution. One of the main factors influencing economic growth, employment, and wages is education. Neglecting the economic dimension of education would jeopardize the prosperity of next generations and have far-reaching effects on social exclusion, poverty, and the viability of social security institutions (Woessman 2015).

Accordingly, the most important thing should be to prioritize education since it gives people the tools they need to help themselves, which enhances governance, lowers poverty, and combats corruption. Primary education, which falls between early childhood education and secondary education, is usually the first year of obligatory education. It is a foundational skills acquisitional education which equips individuals with basic literacy, numeracy, and critical thinking skills, which are essential for further education and productive employment (UNESCO, 2012). Secondary education builds upon primary education and provides individuals with a broader knowledge base and more specialized skills that enhancing their productivity and employability (World Bank, 2018).

Technical and Vocational Education and Training (TVET) programmes offer practical skills and technical knowledge that align with industry needs, preparing individuals for specific occupations and improving labour market outcomes which might result in significant growth in the economy. Tertiary education is defined by the World Bank (2019) as comprising universities and establishments that offer courses in particular areas of higher learning, such as technical training centers, community colleges, nursing schools, research labs, centers of excellence, and distance learning centers. This suggests that action to improve higher education (HE) needs to be taken urgently to allow time for its effect on economic growth and development. Tertiary education, such as universities and colleges, develops specialized knowledge, critical thinking abilities, and research skills. It fosters innovation, entrepreneurship, and the creation of new knowledge, driving economic growth (World Bank, 2019).

The value that comes with education explains why funding for it is rising in importance on a global scale. This is due to the perception that the prevalence of poverty in households is strongly correlated with educational level (UNESCO 2010). Long-term economic growth and social transformation are heavily dependent on the availability of high-quality educational opportunities for all. Therefore, increasing equity in school enrollment and quality across all demographic categories appears to lead to a more equitable distribution of income and lessen socioeconomic disparities overall (UNESCO 2010). Hanushek (2016), however, contends that higher education is not profitable without strong fundamental skills and that their quality is crucial.

When comparing nations, it seems that the higher caliber of engineers generated in those with more knowledge capital have a noticeable effect on growth disparities. The effects of a lack of education could differ in middle-income nations. For instance, young people with less education who are unable to wait for the correct kind of employment are more likely to work in low-paying jobs in low-income countries. In contrast, unemployment is more of an issue in several middle-income nations, such as Brazil (UNESCO 2012). The faster industrial transition, low inflation, stronger exports, higher-quality education, or less inequality are some of the other underlying reasons that may account for these countries' superior development patterns. According to Sparreboom and Staneva (2014), raising the educational attainment of the labor population entering developing nations will not guarantee that workers with higher skill levels may be quickly integrated into non-vulnerable positions.

In many nations, including those in Africa, the percentage of young people with just or less than a primary education is higher for those in vulnerable employment; in contrast, individuals in non-vulnerable industry are more likely to have completed secondary or university school. Young people with low levels of education are more likely to work in agriculture, whereas those with

higher levels of education are more likely to work in industry and services, where productivity is often higher (Starreboom and Staneva 2014). In this regard, the returns on education for individuals working in paid employment—for whom a year more in school typically translates into a greater salary—and those working for themselves—for whom a big return on investment is far less certain—differ significantly. These metrics are all highly correlated with economic growth.

Concepts of Education and Economic Growth

In general, the term "economic growth" refers to the rise in the quantity of products and services generated by an economy during a given time frame, usually a year. Traditionally, it is expressed as the real GDP (real gross domestic product) growth percentage. That is to say, a reasonable way to quantify economic growth would be to look at the percentage change in a nation's GDP (Gross Domestic Product or GNP (Gross National Product)). The primary quantitative measures of output for a year are a country's continuously rising production volume or its rising gross domestic product (Mladen, 2015). Compared to economic development, economic growth is a more limited term. It is a rise in the actual level of national output of a nation and can be brought about by advancements in technology, higher resource quality, and higher resource quantity. Another way to describe it is as a rise in the value of the products and services generated by all economic sectors. A nation's GDP growth can be used to gauge its economic growth.

Education on the other hand, can be defined as a process of socialization through which an individual is taught on desirable values with which the inherent values needed for survival and continuity of the society are passed on. Agada (2004:15) stated that "education is a means by which society provides for the transmission of its culture to the young ones or a means whereby the culture or the total way of life of the society can be advanced". He further said that education may be defined as the inculcation of values, knowledge, skills and attitudes by means of institutions that have been created for this purpose. Ernest (2011) went further to define education as the inculcation of attitudes, skills, values and knowledge by means of intuitions that have been developed for such purpose. The relationship between human capital and economic growth is one way to gauge the value of education for people and societies.

The Relevance of Education to Economic Growth

The relevance of education to economic growth has been extensively studied and recognized by scholars and economists worldwide. Here is a critical analysis that highlighted the importance of education in fostering economic growth and development.

Human Capital Theory: One of the most prominent theories supporting the link between education and economic growth is the Human Capital Theory proposed by Nobel laureate Gary Becker. According to this theory, education enhances an individual's skills, knowledge, and productivity, leading to higher economic output (Becker, 1964). This synergy can boost people's ability and earnings which will affect their life circumstances and the general economy.

Skills and Labor Market Efficiency: Education equips individuals with the necessary skills and knowledge required for employment in different sectors of the economy. A skilled workforce contributes to increased labour productivity and efficiency, which, in turn, drives economic growth (Mincer, 1958 & Kuwar, 2021).

Technological Advancement and Innovation: Innovation and technical breakthroughs are essential engines of economic growth, and education is essential in promoting these developments. People with higher levels of education are more likely to work in research and development, which produces and uses new technology (Romer, 1990 & Kuwar, 2021).

Education and Income Inequality: Education has the potential to reduce income inequality within a society. As individuals acquire higher levels of education, they have access to better job opportunities and higher incomes, which can help reduce disparities in wealth distribution (OECD, 2015).

Education and Entrepreneurship: Education fosters entrepreneurial skills and encourages

innovation, leading to the creation of new businesses and industries. Entrepreneurship contributes to economic growth by generating employment opportunities and increasing productivity which in turn boost economic growth (Audretsch & Thurik, 2004).

Education and Economic Resilience: a populace with higher education is more adaptable and resilient to economic shocks. During times of economic downturn, individuals with higher levels of education are better equipped to retrain and acquire new skills, facilitating economic recovery and growth (OECD, 2020).

The Relationship Between Education and National economy.

The relationship between education and the national economy is complex and multifaceted, and it has been extensively studied by researchers and economists. Here is a critical analysis supported by citations and references that highlight the significance of education for the national economy:

Economic Growth and Productivity: In order to promote economic growth and raise national productivity, education is essential. Studies have repeatedly demonstrated a favorable relationship between economic production and educational attainment. In this instance, nations with greater levels of education typically see faster rates of economic expansion (Barro, 2001).

Labour Market and Employment: Education significantly impacts the labour market and employment outcomes. Greater employment, higher incomes, and lower unemployment rates are all associated with higher education levels. Moreover, education enables individuals to adapt to changing labour market demands and contributes to workforce productivity (Card, 1999 & OECD, 2020).

Skills and Innovation: A country's ability to innovate and advance technologically depends heavily on its educational system. People with higher levels of education are more likely to work in research and development, which produces and uses new technology. This, in turn, drives economic competitiveness and sustained growth (Acemoglu, 2009).

Poverty Reduction and Income Inequality: Eliminating poverty and income disparity is largely dependent on education. It gives them the abilities and information they need to pursue improved employment prospects and higher-paying careers. Moreover, education enhances social mobility, enabling individuals to break the cycle of poverty (World Bank, 2018).

Social Cohesion and Stability: Education contributes to social cohesion and stability within a nation. It promotes values such as tolerance, respect, and understanding among individuals from diverse backgrounds. A populace that is educated is more likely to engage in civic participation, democratic processes, and sustainable development (UNESCO, 2015).

Economic Growth as Driver of Human Development

Not only is economic growth associated with a decrease in poverty, but there is also a positive correlation between economic growth and other indicators of human development. Economic growth is a vital tool for extending the real freedoms that people value, not essentially about materialism. Improvements in overall living standards, such as more possibilities for individuals to eat better, live longer, and grow healthier, are closely correlated with these freedoms (Mladen, 2015). On this note, a thorough economic examination of a nation's opportunities and circumstances should form the foundation of any economic growth approach. This entails evaluating the primary growth restraints, identifying market and governmental shortcomings, weighing the advantages and disadvantages of taking steps to loosen these restrictions, and estimating the risks associated with the suggested policy program. The analysis will produce a prioritized list of steps (reforms and expenditures in policy and institutions) that could spur human growth.

In this scenario, developing such tactics would require excellent analytical work grounded in in-depth understanding of economic research. This will involve government, the private sector, local researchers, high quality expertise from academia and support from external researchers with the purpose of profiling and bringing practical solutions to how people acquire

requisite knowledge and skills to be more active in the labour market. A growth strategy will include plans for spending on social and physical infrastructure as well as other growth-related efforts including economic policy measures (Grant, 2017). Now that the macroeconomic environment has improved, the main task facing nations is to create policies that prioritize micro-level changes, establish institutions, and encourage investment to support them.

Essential Conditions for Growth that Leads to Human Development

According to Venables (2006), Bhattarai and Shrestha (2015) the essential conditions for strong growth that leads to human development are as follows:

1. **Physical capital Growth:** This requires investment in physical capital which have to do with the plants, machinery, raw materials, etc. that are central to production. Investment at all scales requires financial capital. Every country that has achieved sustainable growth has managed a significant increase in the levels of both domestic and foreign investment as a percentage of GDP. Significant technology is usually embodied in capital goods such as plants and machinery that help to support a country's move up the technological ladder. Therefore, expensive access to finance would cause problems to investment, particularly for small and medium-sized enterprises and for the informal sector. Meanwhile, poorly targeted subsidies have the capacity to hamper growth by redirecting capital away from where it is most productive.

2. **Human Capital Investment in Education and Skills:** Investment in human capital directly leads to improved human development as well as helping to drive growth. The costs of this investment are both direct (for example, the cost of school equipment and books) and indirect (the opportunity costs of the wages lost from remaining in education). A wide range of labour skills are needed to catalyze and sustain economic growth, including education at all levels from primary schools through to universities, and including technical and vocational training.

3. **The rule of Law:** The business environment needs to be safeguarded to ensure that the returns of investment will be collected by investors. Political instability, corruption and crime can all threaten potential returns and make investment unattractive and thus damage the prospects for growth. Strengthening the capacity of relevant public institutions for protecting property rights will be important to avoid the diversion of foreign investment which could substantially reduce the scope for technology transfer that will increase productivity and ultimately growth (Bhattarai and Shrestha (2015)).

4. **Competitive Markets:** Competition typically ensures that consumers are able to obtain more goods at lower prices than under a monopoly. Judicious use of regulation will help foster a competitive environment. It is important that this is applied by an independent body that is not susceptible to capture by any particular interest group. Ensuring that businesses have relatively easy access to and departure from markets, as well as chances for business innovation that can boost productivity—which in turn boosts long-term growth—is crucial.

5. **Macroeconomic Stability:** The expected rate of return and the project's level of risk are factors that influence investors' judgments. The necessary rate of return increases with risk. Reducing the risks associated with investment requires a stable macroeconomic environment, which includes an exchange rate regime that is not unduly unstable or distorted, monetary policy that produces low and stable inflation, and efficient management of government taxation and spending to provide public services. Recall that when there is a higher chance that an individual will not have a job after completing their education, they are less likely to want to pay for it.

6. **Infrastructure:** It is essential for investors to have easy access to markets, labor, finance, and raw supplies. For the benefit of enterprises, this calls for the development of transportation, communication, and e-banking infrastructure in addition to a steady supply of power and other utilities.

7. **Openness to Trade and Investment:** In recent times, no nation has seen consistent growth without effectively assimilating into international markets. This has two aspects: the integration into input markets, particularly the financial capital market, and the integration into goods markets. A nation's products markets should be open to promote growth, technological

transfer, increased competition, and consumer benefits. Integration of capital markets facilitates technological transfer from the industrialized world, risk sharing among nations, and a leveling of living standards. For domestic producers to react more easily, reforms must be implemented in the right order and at the right pace. For capital market integration, this is particularly crucial (Venables, 2006).

8. **Increased Agricultural Productivity:** Large agricultural sectors are common in low-income nations. Given the large number of people employed in these sectors, productivity gains in agriculture frequently act as a stimulant for growth and have a significant impact on alleviating poverty. Their attempts to accomplish growth, poverty reduction, and food security for the foreseeable future will be aided by creating or adapting technology and enhancing agricultural markets for seed, fertilizer, and agricultural outputs.

Other Specific Areas Education Contributes to Economic Growth

Numerous specialized fields see increased economic growth as a result of education. The following are some particular fields in which education is crucial for promoting economic development:

Human Capital Formation: Education is a primary driver of human capital formation, which refers to the accumulation of knowledge, skills, and abilities of individuals in a society. Human capital is crucial for economic growth as it enhances labor productivity and innovation (Hanushek & Woessmann, 2008).

Technical and Vocational Education: Technical and vocational education and training (TVET) equips individuals with specific skills and knowledge required for various sectors of the economy, such as manufacturing, construction, and services. TVET contributes to the development of a skilled workforce, addressing the specific labor market needs and driving economic growth (UNESCO-UNEVOC, 2018).

Entrepreneurship and Innovation: Education fosters an entrepreneurial mindset and encourages innovation, which are critical drivers of economic growth. By providing people with the abilities, information, and mindset needed to recognize and seize entrepreneurial opportunities, entrepreneurship education helps to establish new companies and sectors of the economy (Fayolle & Gailly, 2015).

Research and Development: Education, particularly at the tertiary level, contributes to research and development (R&D) activities, which drive innovation and technological advancements. Higher education institutions play a critical role in conducting R&D, leading to the creation and adoption of new technologies that enhance economic productivity (Abramovsky, Harrison, Simpson & Toole, 2007).

Education for Sustainable Development: Education that incorporates sustainable development principles equips individuals with the knowledge and skills to address environmental, social, and economic challenges. Education for sustainable development promotes sustainable practices in various sectors, such as energy, agriculture, and transportation, contributing to long-term economic growth and environmental stewardship (UNESCO, 2014).

Conclusion

A substantial investment in human capital through education is necessary for a nation to attain sustainable economic development. Education should enhance people's self-awareness, increase their productivity and creativity, and encourage entrepreneurship and technological advancements that will enhance their quality of life. Furthermore, education is essential to ensuring social and economic advancement as well as a more equitable distribution of resources. No economic growth and development can exist possibly without a good education. Through education people become more sophisticated, mature and knowledgeable and certainly provide the technical skills and knowledge necessary for a better use of innovative ideas and technology.

The best way to combat poverty and raise living standards in developing nations is through

economic growth. Education is the primary determinant of economic growth, employment, and earnings. Growth can create positive feedback loops of wealth and opportunity. Therefore, neglecting the economic aspect of education would jeopardize future generations' prosperity and have far-reaching effects on social exclusion, poverty, and the viability of social security institutions.

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