



Education as a Strategic Investment for National Human Resource Development

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Abstract. Education is crucial for creating competitive human resources and improving economic growth. It allocates individuals socially and requires expanding vocational education, improving teacher competence, and adjusting the curriculum. Developing superior human resources is essential for economic growth and effective resource management. This study uses a qualitative approach and descriptive research type. The data collection technique used was a literature study, with qualitative data analysis carried out by reading, classifying, and understanding the collected data, looking for patterns or themes, and interpreting the results to understand the relationship between education and the economy. The passage discusses the importance of human capital in economic development and the vital role of education in enhancing human capital. It cites several studies by experts emphasizing the need to prioritize education and skills development for economic growth and public welfare. The passage also provides examples of successful countries that have invested in high-quality human resources and the challenges developing countries face in achieving education equity. The passage emphasizes the importance of education as a strategic investment for developing a nation's human resources and promoting economic growth. It suggests that vocational education, improving teacher competence and certification, and updating the curriculum structure can enhance the quality of human resources. The passage also emphasizes the need for continuous adjustments and pragmatic education to meet the job market's needs.

Keywords: Human Capital · Human Resources · Education Equity · Economic Growth

1 Introduction

The education sector in the development of a nation occupies an important and urgent space in forming superior and competitive human resources [1]. In addition, education is a basic need for every human being because quality human beings can also relate

to a quality life order Education can create and increase one's work productivity and the competitiveness of the nation, especially in the current era of globalization [2]. It is necessary to increase social welfare to create accelerated development, particularly in the economic sector [3, 4]. Therefore, do not be surprised if the problem of human resources.

Demaine and Schneider argued that even if someone has low education, they can still have good productivity if given training or skills and even the same level of productivity as someone with higher formal education [5, 6]. This argument is known as the theory of status competition allocation. This theory emphasizes education as a social entity that allocates someone socially according to their educational level. This argument means that someone who wants to achieve a better social status will also be motivated to obtain a better education. Although people with higher education have a better proportion of national income, this increase will not automatically boost economic growth expansion. Furthermore, a study by Foster and Rosenzweig on the impact of education on farmers in India during the green revolution showed that in the agricultural sector in India (including Indonesia), which is where the majority of the poorest population is, farmers with basic education were much more productive than those who never went to school [7].

The development of human resource quality has been carried out through the expansion of strategic elements, including the development of vocational education to meet industry needs, improving the competence and certification of teachers, and improving the curriculum structure by continuously adjusting to the progress of the times, including pragmatic education such as job training courses and others [8, 9]. This is intended to ensure support for creating superior and competitive human resources. Education is an investment process that can be equated with investment in goods and services sectors. The return on investment cannot be seen in the short term but is a long-term goal [10].

Based on data from the World Bank in the 2022 Indonesia Human Development Index report, it reached 72.91, an increase of 0.62 points (0.86 percent) compared to the previous year (72.29). However, other data suggest that Indonesia, the fourth most populous country in the world and one of the largest economies in Southeast Asia, has faced challenges in improving its competitiveness in the global market. According to the Institute for Management Development (IMD) World Competitive Yearbook 2022, Indonesia experienced a decline in competitiveness ranking from 37th in 2021 to 44th in 2022. This is the lowest in the past five years since 2018. Although there was an increase in 2019, in 2020 and 2022, Indonesia experienced a decrease in its competitiveness ranking.

The decline in competitiveness ranking indicates that Indonesia still faces many challenges in improving its competitiveness in the global market. Therefore, it is appropriate that human resource development remains the top priority of current development to answer these global challenges. It is necessary to enter and excel in global competition, and there must be an improvement in the quality of human resources. Economic growth is no longer the only indicator in measuring the economic development of a country, but also the quality of human resources as indicators proposed by UNDP. In realizing a prosperous, fair, and prosperous Indonesia, it must be supported by good Human Development Index (HDI) growth as well; if so, the Indonesian nation's determination to

become the largest economic power in Asia and even the world can be realized, the indicators towards it are very clear with various developments and progress in Indonesia's development today.

The progress of a nation's education is a long-term investment to face global competition in the future, and education will have an impact on all other sectors, so it is not surprising that Schultz [11] put forward his thoughts entitled Investment in Human Capital that education is an investment and not just a process of transformation. Science, knowledge and values alone, or part of consumption as usual. Furthermore, Dennison [12] argued that human resource development activities in various ways and educational models that aim to develop knowledge, skills and values would directly impact a nation's economic growth. Several developed countries now believe education is a form of human capital investment and has become the main or priority sector (leading sector) in development. Therefore, these countries are very concerned about the allocation of education spending. In the 1970s, research on economic growth and education stagnated due to doubts, especially in developing countries. G. Becker (1964), a sociologist, criticized this matter, arguing that human capital theory places humans more in the material dimension, which ignores socio-cultural aspects. However, then finding a new perspective in looking at human Capital, a belief arises that education can not only be seen as an economic investment activity, but some things are more urgent, namely, the socio-cultural dimension, is not education very related to human values.

Nevertheless, Berkowitz [13], supported by several other neoclassical researchers, again provide important beliefs about the importance of superior human resources in driving economic growth even for all sectors of macro development. Thus, further strengthening the argument that education will contribute strongly to economic growth after it occurs and the effects of interaction with other material investments arise. This means that investment activities that are physical capital in nature will have a multiplier effect in the long run if, at the same time, investments are made in human resources, which have a role as users and actors in these investment activities. Effective resource management supported by the development of superior human resources can become a staple in the development process. This is where education plays an important role as an integral element covering the entire spectrum of life.

2 Method

2.1 Research Approach

This study uses a qualitative research approach. This approach was chosen because this research aims to obtain a more in-depth and comprehensive picture of the relationship between education and the economy and their respective roles in economic development. A qualitative approach is suitable for descriptive, exploratory research and focuses on deep understanding from the perspective of the individuals or groups involved [14].

2.2 Type of Research

This research uses descriptive research type. This type of research was chosen because this research aims to provide a detailed picture of the relationship between education and

the economy and the role of each in economic development. In this type of descriptive research, researchers will collect and analyze data to provide a detailed description of the studied characteristics or phenomena [15].

2.3 Data Collection Techniques

This study uses data collection techniques through literature study, which collects and analyses information from various sources relevant to the research topic. The sources used in literary studies include books, journals, articles, reports, official documents, and other accessible sources. The literature study method is used when the researcher wants to study a particular topic in-depth and thoroughly or when collecting data directly is impossible. In a literature study, researchers will select sources for the research objectives and then analyse the data collected [16, 17].

2.4 Data Analysis Techniques

The data analysis technique used in this research is qualitative data analysis. Qualitative data analysis is done by reading, classifying, and understanding the data that has been collected. Researchers will look for patterns or themes that emerge from the data and then interpret these themes. Interpretation results will be used to fully understand the relationship between education and the economy.

3 Results and Discussion

3.1 The Contribution of Education to Economic Growth

Most nations worldwide share a common goal of improving their citizens' physical and spiritual well-being through the creation and even distribution of welfare. Any disparities in welfare must be addressed to reduce inequality. The economic aspect of welfare is interrelated with social, religious, political, cultural, and societal aspects in a systematic correlation pattern, highlighting the deterministic correlational nature of such institutions [18, 19]. Therefore, continuous education is vital to address the socio-economic factors within society. Formal education is commonly perceived to lead to economic success, and this perception is not entirely unfounded. Social institutions have apparent functions and objectives, illustrating the benefits of their existence [20, 21]. In Indonesia, formal education has been a prerequisite for most jobs since the New Order era. During colonialism, native aristocrats with formal education were allowed to work in government agencies. Thus, education is viewed as a tool for obtaining social stability [22].

Formal education or school is believed to lead to economic success due to the advancement and development of educational infrastructure and a curriculum that provides skills that meet the job market's needs. Currently, educational institutions are competing globally and must continue to innovate to produce students who are strong and excel in the job market competition. Human resources with high skills and abilities excel in competition and have a professional, efficient and innovative attitude.

However, there is still a problem of long-term unemployment, and some of them are education graduates. This indicates that there may have been a failure in the national education system. Therefore, educational institutions should play a role as a catalyst for welfare, not as a contributor to social problems through intellectual unemployment. It is essential to continue to study the causes of this social phenomenon, and studies on the sociology of education must provide ethical and objective solutions regarding the relationship between economic and educational aspects.

3.2 Relationship of Education with Economic Life

Higher levels of education are correlated with greater economic prosperity, indicating that there is a positive relationship between education and economic life. However, uncertainty exists regarding the order of these two factors and whether economic growth precedes or follows educational advancement. There is evidence of a reciprocal relationship between the two so that advancement in education affects advancement in commerce and vice versa [23, 24].

There is widespread agreement among proponents of both consensus and conflict theories that schools' primary role is to help young people acquire the skills they will need to find and keep good jobs in the economy [25, 26]. In adult education, the goal is to prepare and improve skills so that students can face the present challenges. All three educational institutions, namely family, school, and society, have different roles but complement each other [27]. The role of each institution in a traditional society differs from that of a modern society because the demands of society have also changed (Table 1).

The family is crucial in traditional societies in helping to prepare young people to become self-sufficient adults. In a traditional family, parents and other adults serve as a means of fostering a variety of traditions and skills. In contemporary societies, some of a family's educational responsibilities are delegated to other specialized institutions. In addition to working with schools to support and monitor their children's education, parents and families restrict their activities to those necessary for basic child-rearing.

In contemporary societies, educational institutions equip the labor force with specialized knowledge and abilities to meet the escalating demands of specialization. The idea of "equal opportunity" in education is becoming a reality, and schools are now open to the general public, despite many contentious issues. Through compulsory education programs, elite universities have become more populist. As a result, the educational tools and techniques used in modern society and traditional economies are different. Schools also have different selection processes. Children and young people are prepared for various jobs and job markets by schools working with families.

It is important to emphasize that the economic system and education are intertwined. The potential for educational growth is higher in a society with a high standard of living because people are better prepared and have access to more resources. The operational definition of social class or socioeconomic status primarily includes income, occupation, and education, and there is a strong correlation between these three factors [28].

Table 1. The Role of Educational Executors in Traditional and Modern Communities in Relations with Economic Life

Educational Environment	Traditional Economy	Modern economy
Family	Education plays a primary role in preparing children to quickly become capable of performing as adults in the economy (skills, mindset, values, attitudes).	<ul style="list-style-type: none"> • Provides basic nurturing. • Hands over education to schools at a certain age of the child. • Encourages, assists, and supervises children in the school system.
School	<ul style="list-style-type: none"> • It prepares the elite group with basic abilities (reading, writing, and arithmetic). • It has a selective function and an allocative function. 	<ul style="list-style-type: none"> • Prepares experts in various fields of life. • Has a selective function and an allocative function.
Public	<ul style="list-style-type: none"> • It provides models to be emulated. • It provides internships and apprenticeships. • It organizes initiation ceremonies. 	<ul style="list-style-type: none"> • Organizes structured adult education. • Provides communication media. • Provides a competitive arena.

3.3 Economic Growth as an Impact on Education

Smith [29] stated that human resources in the economic context, known as human capital, function as inputs or production factors that determine a nation's welfare through two factors, namely the economics of scale and the creation of high-quality human resources. In the context of educational development, this means that enhancing human capital is essential. Solow [30], Romer [31], Gupta [21], and Krugman [32] similarly argued that human resources play a vital role in economic growth, making it a serious concern and a top priority for the development of public welfare by prioritizing education, skills, and adequate distribution of health services.

Lim [33] revealed in a study that human resources with excellence and quality have significantly contributed to the economic growth of South Korea and Japan. The quality of human resources enables them to adapt to technological advancements, which are important for global changes. Similarly, Al-Sammarai & Zaman reported that one of Malawi's government policies that offer free education at the primary level and increase the education sector's budget has positively impacted the enrollment rate in primary education. However, Malawi is still facing the challenge of education equity. The correlation between education and economic growth is a long-term relationship. A country's education can only advance if supported by a stable economy [34].

4 Conclusion

The passage discusses the importance of education in developing a nation's human resources and its impact on economic growth. It emphasizes that education is a basic individual need and a strategic investment that can create a superior and competitive workforce. The passage cites studies that show that education can increase work productivity and competitiveness, especially in the current era of globalization. It argues that education can create accelerated development in the economic sector, leading to social welfare. The passage also points out that the development of human resources quality can be achieved by expanding vocational education, improving the competence and certification of teachers, and updating the curriculum structure. It highlights the need for continuous adjustments to the progress of the times, including pragmatic education such as job training courses and others.

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