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ẢNH HƯỞNG CỦA NỀN GIÁO DỤC LÊN SỰ PHÁT TRIỂN KINH TẾ BỀN VỮNG Ở VIỆT NAM

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Tóm tắt

Giáo dục từ lâu đã được xem là một trong những yếu tố cấu thành sự bền vững trong quá trình phát triển kinh tế. Mục đích của bài nghiên cứu này là phân tích về những nhân tố thể hiện mối quan hệ giữa giáo dục và tăng trưởng kinh tế bền vững. Từ đó, nêu ra những ảnh hưởng của nền giáo dục Việt Nam lên sự phát triển bền vững của nền kinh tế đất nước. Bằng phương pháp nghiên cứu định tính, bài nghiên cứu cũng đã tìm hiểu các vấn đề, cơ hội, thách thức và triển vọng phát triển kinh tế bền vững ở Việt Nam đặc biệt liên quan đến giáo dục trong những năm gần đây. Cùng với những phân tích về những tác động, bài nghiên cứu này sẽ đưa ra những đề xuất dành riêng cho Việt Nam để thúc đẩy tác động tích cực của giáo dục đối với mục tiêu phát triển kinh tế bền vững.

Từ khóa: Giáo dục, phát triển kinh tế bền vững, Việt Nam

THE IMPACTS OF EDUCATION ON SUSTAINABLE ECONOMIC DEVELOPMENT IN VIETNAM

Abstract

Education has long been seen as one of the components that contribute to economic development's sustainability. The purpose of this study is to examine the characteristics that demonstrate the association between education and sustainable economic growth. Following that, the implications of Vietnamese education on the country's economic development are discussed. Using qualitative research methodologies, the research delves into the issues, possibilities, challenges, and chances for long-term economic growth in Vietnam, with a focus on education in recent years. Along with the analysis of the impacts, this research will give specific recommendations for Vietnam to promote the positive influence of education on the objective of long-term economic growth.

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1. Introduction

1.1. Rationale of the study

The human being is the subject, motivation and drive of development. As education plays an essential role in determining human resources quality, striving for improvements in human resources is a must for economic development. With the aim to become a developed nation by 2050, it is essential for Vietnam to have a great concern in the education field in achieving sustainable economic development. From the above statement, the authors' group decided to select the topic **“The impacts of education on sustainable economic development in Vietnam”**.

1.2. Objectives

In this research, we would like to analyze some elements of the components of sustainable economic development and education. At the same time, giving an overview of the actual implementation of the above factors in sustainable economic development and education in Vietnam. From there, we also propose orientations and solutions for the authorities, educational institutions and households on developing education, improving the quality of human resources, and promoting sustainable economic growth.

1.3. Objects and scope

Our team is carrying out this topic mainly focused on Vietnam's current context.

With sustainable economic development, we focus on three indicators, namely GDP growth rate, social labor productivity, and current account in order to assess the situation in Vietnam.

With education, we choose four indicators, which are enrollment in tertiary education, share of government spending on education, proportion of qualified teachers/lecturers and expenditure on education by households, to qualitatively analyze the impact of education on sustainability of economic growth within Vietnam.

1.4. Structure of the study

Our research comes in 4 parts as following:

Part 1: Literature review - providing fundamental understandings on indicators.

Part 2: Overview - providing general background and current situation.

Part 3: The effects of education on sustainable economic development - providing the achievements and limitations.

Part 4: Recommendations - giving recommendations for the government, households and educational institutions on various aspects.

2. Literature review

2.1. Sustainable economic development

2.1.1. Definition:

Sustainable economic growth is economic development that attempts to satisfy the needs of humans but in a manner that sustains natural resources and the environment for future generations. An economy functions in the ecosystem. We cannot separate the economy from it. In fact, an

economy cannot exist without it. The ecosystem provides the factors of production that fuels economic growth: land, natural resources, labor, and capital. Sustainable economic growth is managing these scarce resources in a manner that they will not be depleted and will remain available for future generations.

In Vietnam, sustainable economic development is the term that meets the economic needs of the present society without adversely affecting the ability of future generations to meet their economic needs, which aims to avoid economic recession, default, insolvency in the future. Sustainable economic development can be defined as the rapid, secure and effective growth in all aspects of a nation's economy. This process requires that economic subjects have the equivalent opportunity to access resources and share the natural resources equally.

2.1.2. Measures of sustainable economic development

a. GDP growth rate

The first indicator that our research defines is the GDP growth rate, known as Economic growth rate. This measures the change in the GDP of the country in comparison to an earlier given period. The amount of change is measured in percentage (%), which serves as a determinant of economic health in the country and the possible growth in the future. The GDP growth rate measures how healthy the economy is. When the number is positive, the economy is growing. When the number is negative, the economy is contracting. Growth rate measurement is necessary to understand the nature of the economy and the direction it may take in the upcoming years.

b. Social labor productivity

Productivity measures how efficiently production inputs, such as labor and capital, are being used in an economy to produce a given level of output. Social productivity is one of the key indicators to assess the sustainable economic development since it drives economic growth, which can be seen that high social productivity means a country is able to produce more goods and services with the same amount of resources or produce the same level of goods and services with less resources than others. Labor productivity also affects all subjects of the economy. Increased productivity gets higher opportunity and profit for businesses, translates into higher wages and working conditions for employees and results in higher tax revenues for the government. Social development is about improving the well-being of every individual in society so they can reach their full potential, which contributes to sustainable development. The success of society is linked to the well-being of each and every citizen.

c. Current account

Our last indicator of Sustainable Economic Development is the current account. The nature of the current account reflects income and expenditure from the transfer of ownership of assets between residents and non-residents. The current account figure reveals the pattern of foreign trade. If the balance of trade is negative, then the country is importing more goods and services than its exports of these. The current account represents a country's imports and exports of goods and services, payments made to foreign investors, and transfers such as foreign aid. The four major components of a current account are goods, services, income, and one-way transfers (give, donate, non-refundable aid...).

2.2. Education

2.2.1. Enrollment in tertiary education

According to the World Bank (WB), tertiary education refers to all formal education after secondary level, including public and private universities, colleges, technical training institutes, and vocational schools. While pre-secondary education provides students with foundation through basic theoretical knowledge, tertiary education focuses on practical knowledge specializing in specific professions, from which students cultivate necessary skills to join the labor force. Tertiary education may provide a greater impact on economic growth in comparison to lower levels of education (Oketch M, McCowan T, Schendel R 2014). WB also stated that the economic returns for tertiary education graduates are approximately 17% while the figures for primary and secondary education are lower, which are 10% and 7% respectively.

Tertiary education is important in developing human capital and creating a highly skilled workforce for a nation, which is the primary incentive for economic development and one of the pillars in creating the knowledge-based economy. Since tertiary education equips students with highly applicable knowledge, they can be more productive and specialized in their tasks, hence improving the performance and enhancing the effectiveness when working. Besides, they are also more conscious about the environment, as well as being more flexible in case economic shocks occur. This not only benefits learners individually but also the national economy as a whole.

2.2.2. Share of government spending on education (%GDP)

Since human capital is the primary factor motivating sustainable economic development, spending in education means investing to achieve development. Government spending on education refers to “direct expenditure on educational institutions as well as educational-related public subsidies given to households and administered by educational institutions”, the state budget for “schools, universities and other public and private institutions delivering or supporting educational services”, according to the Organization for Economic Cooperation and Development (OECD).

This research takes the indicator of percentage of government spending on education to GDP instead of the spending amount since we take into account the difference in the size of each nation’s economy. This indicator is more superior to compare expenditure on education of different countries over time. This also shows the government’s attention to education in comparison to other fields of investment. The higher the share of government expenditure on education is, the higher the priority and attention put on education and enhancing human capital are.

2.2.3. Proportion of qualified teachers & lecturers

The definition of qualified teachers in each country and each educational level is different. Teachers at each grade level are evaluated based on different standards. Teachers in charge of teaching and educating in educational institutions, excluding the Academy, institutes established by the Prime Minister under the Law on Science and Technology, are allowed to train at the doctoral level. Teachers who teach at preschool, general education and other educational institutions, teaching at elementary and intermediate levels are called teachers; Teachers who teach at the college level or higher are called lecturers.

The Government shall prescribe the roadmap for raising the trained standard qualifications of preschool, primary and lower secondary school teachers specified at Points a and b, Clause 1 of this Article. The Minister of Education and Training and the Minister of Labor, War Invalids and

Social Affairs shall, within the ambit of their duties and powers, stipulate the use of teachers in case the provisions of Clause 1 are not met.

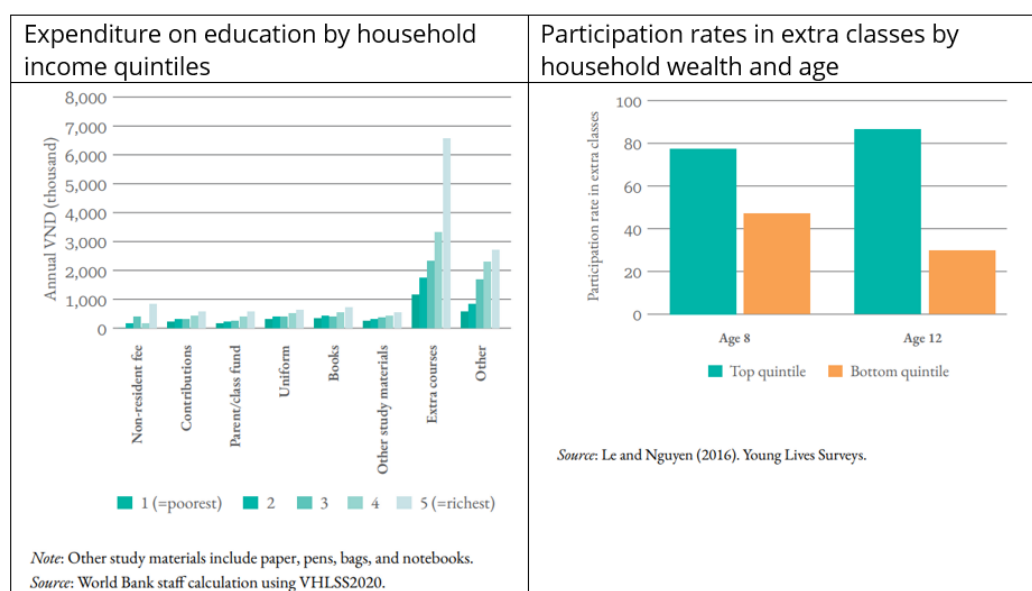
According to the report of the Ministry of Education and Training, currently the percentage of teachers meeting training standards (according to the Education Law 2019), preschool level is 91.7%; primary school is 74.8%; lower secondary school is 86.1%; high school is 99.9%. Thus, primary school has the highest percentage of unqualified teachers, 25.2%; followed by junior high school with 13.9% and high school with only 0.1%.

2.2.4. Expenditure on education by household income quintiles

Greater human capital is essential for fostering economic growth and development in Vietnam's Next Mile of development. Nevertheless, despite significant improvements in education, there are still significant disparities among socioeconomic classes in terms of education completion rates, the standard of education children gets, and family education spending.

Children in the poorest homes complete their education at a substantially lower rate than those in the richest ones. The money parents invested in their children education can be divided into: non-resident fee (the non-resident tuition fee determined by the Board of Regents and applicable to the academic course that a student plans to enroll in); contributions (the amount that is required of those who qualify for free tuition under the Free Fees Schemes. They receive partial or complete educational fee discounts); parent/class fund (fund sponsored by parent); uniform; books; other study materials (paper, pen, notebook...); extra courses and other.

Figure 1. Expenditure on education by household income quintiles and Participation rates in extra classes by household wealth and age



Source: World Bank/ Young Lives Surveys.

The majority of a household's education budget is spent on extracurricular activities. For all household income levels, that portion of the cost is on par with or even higher than the overall cost of other items. Positively, it demonstrates parents' concern for their kids' educational circumstances, not just in terms of knowledge but also in terms of developing aptitudes and soft

skills... This can guarantee to lead to a future generation that is more holistically developed and adaptive than previous generations. However, the expenditure gap between wealthy households and poor households differs significantly. Education completion rates differ depending on one's background, which in turn affects future employment and economic opportunities and can result in greater inequality.

3.1. Overview

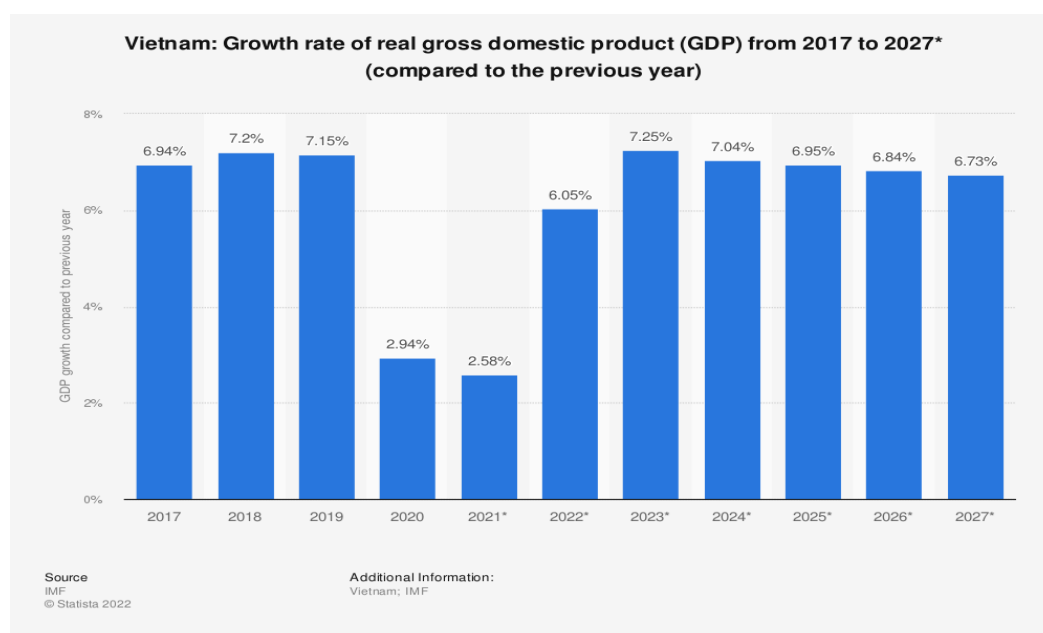
3.1.1. General background of sustainable economic development

a. GDP growth rate

One of the outstanding economic achievements of Vietnam since the implementation of "Doi Moi" is the relatively high economic growth rate. Average period 2011 - 2015 reached 5.9%/year; period 2016 - 2020 reached 6%.

Generally, in the period of 10 years (2011 - 2020) reach 5.95%/year, this rate puts Vietnam in the group of countries with high growth in the region and the world. After COVID-19 lockdowns led to a sharp economic GDP contraction in Quarter 3 of 2021, the economy started to rebound in the fall of 2021 as high vaccination rates enabled the country's re-opening. About 80% of the population were fully vaccinated by the end of December 2021 and mobility restrictions were gradually removed. As a result, GDP growth is forecast to increase sharply from 2.58% in 2021 to 6.05% in 2022, while inflation is forecast to increase by an average of 3.8%.

Figure 2. Growth rate of real GDP (2017 - 2027) (compared to previous year)



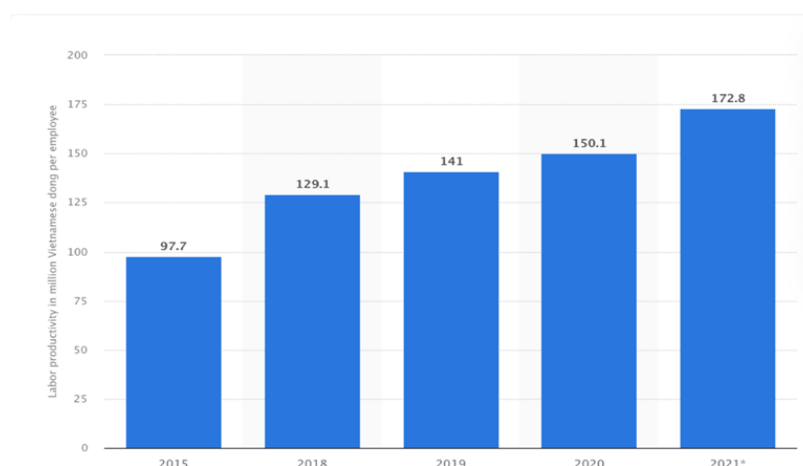
Source: Statista 2022

b. Social labor productivity

The labor productivity of the whole economy at current prices in 2017 is estimated at 93.2 million VND/laborer (equivalent to 4,166 USD/worker) (GSO, 2017). Vietnam's labor productivity in recent years has significantly improved in the direction of increasing steadily over the years, being a country with a high labor productivity growth rate in the ASEAN region.

In 2021, the labor productivity in Vietnam reached 172.8 million VND per employed person at current prices, indicating a continuing growth in labor productivity. In the previous year, the labor force participation rate was at 75.6% in the country. Labor market conditions and household incomes improved in the first half of 2022. However, Vietnam's labor productivity is still very low compared to other countries in the region. Notably, the gap in labor productivity between Vietnam and other countries is still widening. This shows the gap and challenges that Vietnam's economy faces in catching up with other countries' labor productivity levels.

Figure 3. Labor productivity in Vietnam (2015-2021)

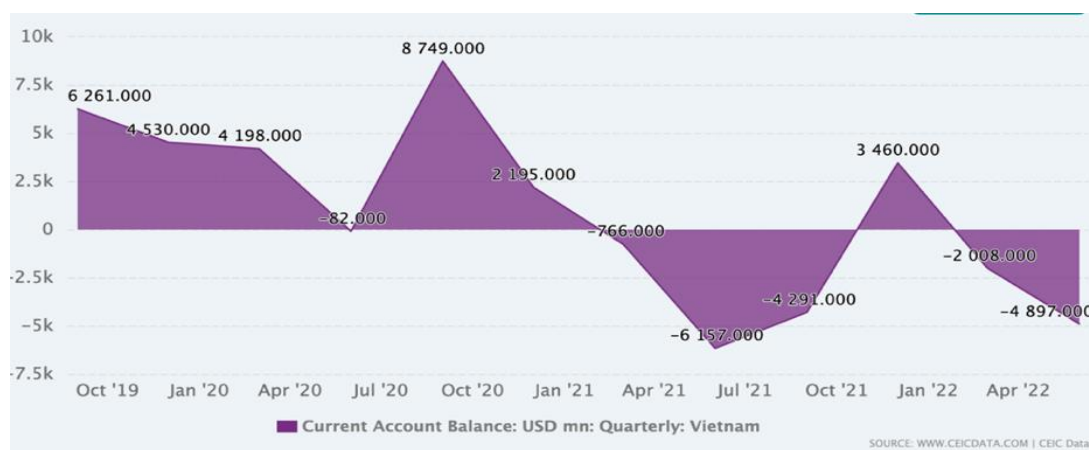


Source: Statista 2022

c. Current account

At a glance report in December 2021, HSBC noted that at the time of the global financial crisis, Vietnam's current account surplus reached the highest level. At the same time, the ability to overcome external shocks gets better and better over time. Even in the first year of the COVID-19 pandemic, Vietnam's current account surplus recorded a record high, equivalent to 5.5% of GDP, thanks to outstanding growth in exports while unusually narrow imports. In the second quarter of 2021, Vietnam witnessed the highest quarterly current account deficit ever, equivalent to 6.7% of GDP in the context of the trade balance shifting from surplus to deficit.

Figure 4. Vietnam's Current Account (2019 - 2022)



Source: Ceicdata.com

3.2. General background of education in Vietnam

3.2.1. Tertiary education

Vietnam's enrollment in tertiary education is considerably low, as the ratio is only at 28.6% in comparison to that of average to higher income countries (55.1%). Whilst the average year of schooling for a Vietnamese is approximately 8.3 years in 2019, and 10.2 years in 2022. The government's expenditure on tertiary education only takes up 15% of the total spending on education, which is equivalent to one-third of that indicator in Macau (China) and half of that in Singapore. These data have proved that the Vietnamese government still lacks focus on improving high-quality labor through tertiary education.

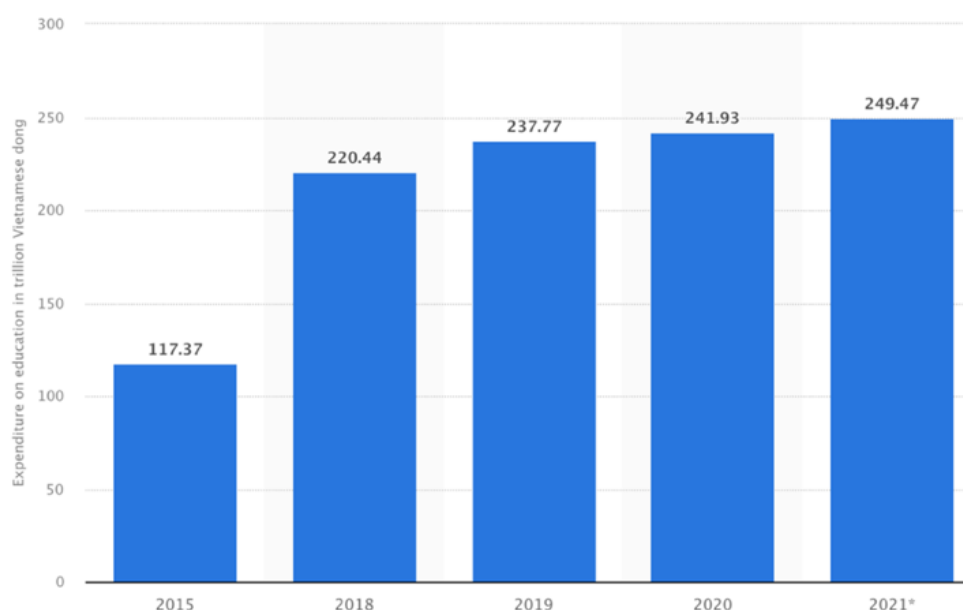
3.2.2. Government spending on education

The Vietnamese government focuses on expanding the scale of the education system and education institutions network. Currently, there are 500 preschools, approximately 3200 primary schools and more than 400 high schools that passed the national qualification in education.

The government has taken action by implementing strategies and policies to improve the education quality of the nation. The spending of the government on the education field takes up 14.8% of the State budget, which is equivalent to 4.1% of Vietnam's GDP. This rate is considered high in comparison with other countries such as the United States (13.1%), Malaysia (16.4%) and Singapore (11.9%).

Recurrent expenditure on education and training in Vietnam has been growing gradually. In 2021, the expenditure for education and training in Vietnam amounted to approximately 249.5 trillion VND. Overall, the private rate of return to schooling in Vietnam is at the global average but higher than in most countries in the region, demonstrating that further investment in education is a sound priority.

Figure 5. Recurrent expenditure on education training in Vietnam (2015 - 2021) (in trillion VND)



Source: Statista 2022

3.2.3. Qualified teachers & lecturers in Vietnamese education system

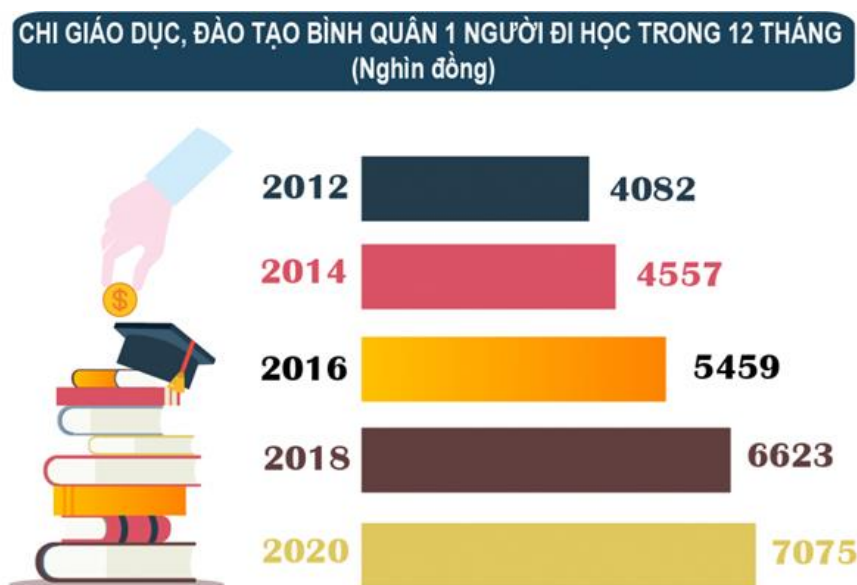
The ratio of qualified teachers and lecturers in different educational levels can be listed: 91.7% for pre-schooling, 74.8% for primary, 86.1% for secondary and 99.9% for high school program (MOET, 2021). It can be indicated that most under-qualified teachers are responsible for primary education. This is due to the new change of qualification criteria in 2019's Law of Education.

3.2.4. Households' spending on education

Household spending on schooling continues to escalate. In 2020, households have to spend, on average, more than 7.0 million VND per person for education, showing an increase of about 7.0% compared to 2018. In urban areas, households spend 10.7 million VND per person, which is 2.1 times higher than that in rural areas. The group of households with the highest income level spends more than 15.4 million VND/person/12 months, or 4.7% greater compared to 2018 and 6.2 times higher than that of the group with the lowest income level (2.5 million VND/person/12 months).

However, if considering the actual expenditure on education and training by region, there is a relatively large difference between the 6 economic regions. The region with the highest spending on education and training is the Southeast region at 11.0 million VND/person/12 months, 3.6 times higher than the Northern Midlands and Mountains (3.1 million VND/person/12 months). The regional disparity in expenditure also reflects the regional disparity in educational attainment.

Figure 6. Average spending per person for educational purposes (2012 - 2020)



Source: General Statistics Office of Vietnam 2019

4. Effects of education on sustainable economic development in Viet Nam

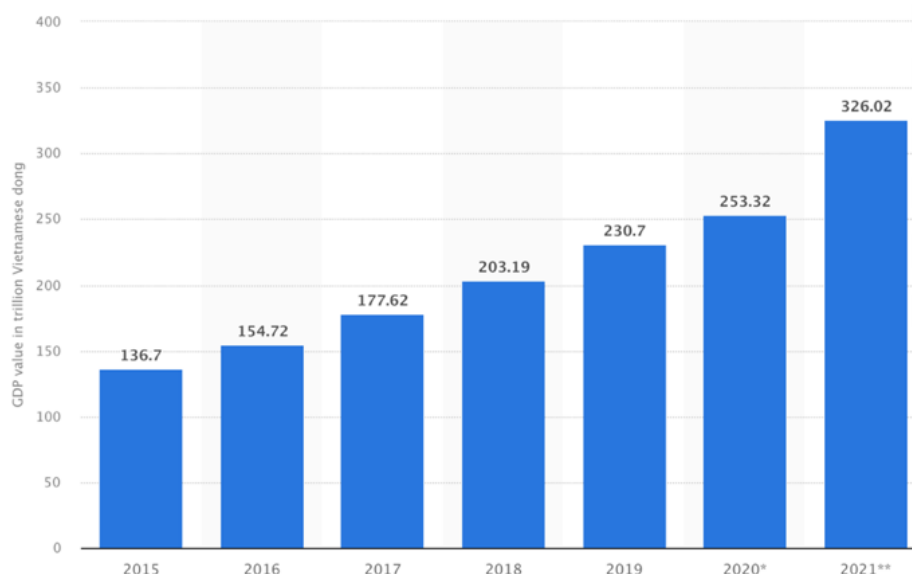
4.1. Achievements:

Education is also an important means of achieving sustainable economic development. A developed tertiary education will be the key to boost Vietnam's productivity growth and thus contribute to the successful realization of the goal of becoming a middle-income country by 2035 and a high-income country by 2045.

Education contributes a great amount to GDP share:

In 2021, Vietnam's education and training sector accounted for a GDP value of approximately 326.02 trillion VND, equivalent to 3.88% of the country's total GDP. In that year, Vietnam's GDP amounted to just under 8.4 thousand trillion VND.

Figure 7. GDP contribution of the education and training sector in Vietnam (2015 - 2021)



Source: Statista 2022

Education contributes to human development and human resource training:

Over the past 25 years, Vietnam has expanded access to education, completed primary education universalization, and increased enrollment rates in lower secondary, upper secondary and post-secondary education.

Vietnam has made significant progress in education in terms of access and quality. The country has witnessed a rapidly growing economy in recent years while having the advantage of a relatively young population. To further advance its economic development, the country has focused on refining its education system. The number of students attending and graduating from colleges and universities is increasing over the years, contributing to the increase in the proportion of trained workers from 40% (in 2010) to 70% (in 2020), in which, workers with university degrees or higher account for 10.82%; colleges accounted for 3.82%; Intermediate level accounted for 4.65% and elementary school accounted for 3.08% of the total labor force (Phuong, 2020), initially meeting the human resource demand according to sustainable economic development goals in Vietnam.

The quality of education in Vietnam is ranked in the top 10 of the world's top innovative education systems. Human resource training to serve the process of international integration has developed in an increasing direction in terms of scale, the number of annual pieces of training and training types is also diversified.

Vietnam's Human Capital Index (HCI) has increased 0.66 - 0.69 in 10 years (2010 - 2020) (WB, 2020). Vietnam's HCI continues to be higher than the average for countries with similar income levels, despite lower levels of public spending on health, education and social protection. This reflects the great achievements in general education over the years. In addition, according to

the Global Human Development Report 2020, Vietnam's Human Development Index (HDI) in 2019 is 0.704, ranking 117 out of 189 countries and territories.

All these factors have contributed to improving Vietnam's labor productivity in recent years. In 2020, the labor productivity of the whole economy at current prices is estimated at 117.9 million VND/laborer (equivalent to 5,081 USD/worker); at constant prices, an increase of 5.4% compared to 2019. On average in 2016 - 2020, labor productivity increased by 5.78%/year, higher than the average growth rate of 4.35%/year 11 - 2015. In general, in the period 2011 - 2020, labor productivity increased on average 5.07%/year (Quynh, 2021).

Education opens opportunities for international economic integration and trade:

Vietnam's socio-economic development strategy 2011 - 2020 included many efforts to modernize the education system, including advancing human capital development, increasing enrollments in higher education, and adapting the education system to the needs of the country's market-based economy. Vietnam's government does not only want to improve national education but also to head towards facilitating internationalization.

In the era of the Fourth Industrial Revolution with the rapid development of science and technology, the future generation of citizens needs to be equipped with new capabilities and skills to be successful in a globally competitive environment. Education and training have made a great contribution to human resource training and workforce development. On the basis of guidelines and policies of the Party and State on international integration, over the years, the education sector has actively built and promulgated a structural framework of the national education system in the direction of openness and flexibility, linking education levels, levels and between modes of education and training.

The education sector has built and promulgated the structure of the national education system with the structure of 8 levels of education, serving as a basis for building training programs; promote people's lifelong learning; develop planning and policies to ensure quality, improve the efficiency of human resource training to meet the requirements of international integration. In the period 2016 - 2021, our country has had more than 70 international agreements and 23 international treaties signed, contributing to creating a legal corridor to implement many cooperation programs, such as: Exchange students, students, teachers, lecturers; cooperation in education, research, training, exchange of experts...

The education sector and university institutions have approved and signed more than 530 joint training programs with foreign countries, with about 85,000 people enrolled, of which more than 45,000 people completed the program and were awarded degrees. This is a high-quality human resource that contributes to the cause of national construction, protection and development. Up to now, Vietnam has 4 universities in the top 1,000 in the world; 11 universities are among the top universities in Asia; Many disciplines and fields of training are ranked in the top 500 in the world. In terms of human capital, Vietnam's HCI ranks 38th out of 174 economies; Vietnam's educational outcome criterion ranks 15th, equivalent to other countries, such as the Netherlands, New Zealand, Sweden (WB, 2020).

4.2. Limitations

Inefficient state budget for education:

The Government proposes to the National Assembly to ensure that the rate of expenditure on education reaches at least 20% of the total annual state budget expenditure, as required in Resolution 37 and the Education Law. The level of investment for education tends to increase steadily in the period 2011-2020, averaging about 17-18%, in some years nearly 19% (Le, 2020). Besides, the percentage number sounds high, but when it comes to absolute numbers, it is low (Le, 2022). Apart from areas spending over 20% of budget on educational activities such as Hanoi, a wide range of provinces reported having spent below 10% for such activities which are Ha Giang (4%), Tuyen Quang (3%), Son La (9%)...

Unreasonable state budget distribution may lead to the ineffective usage of it and, hence, education is among the negatively affected sector as its budget is not up to requirement. The educational output quality finds it hard steadily growing over the years, facilities and equipment of many vocational training institutions are lacking in quantity and outdated in quality, the quality of the teaching staff has not been paid enough attention are some of the most prominent consequences.

Figure 8. Limited proportion of investment in tertiary education to general financial expenditure on education and to GDP

	2019	2020	2021	2022
State budget for education (billion VND)	286,000	317,000	299,325	330,700
Growth of state budget for education year on year	15.3%	10.8%	-4.7%	15%
Rate of state budget education to annual government expenditure (%)	17.6%	18.18%	17.3%	18%

Source: self-synthesized

To be more specific, Vietnam's government spending on university education is among the lowest in the world. Tertiary education makes a significant difference in a nation's human capital and sustainable economic progress (OECD, 2020). A majority of its member states report that persons with university education have a better status in terms of earnings or work opportunities. In order for an economy to sustainably develop, such an economy shall manage to create as much value added as possible given its current resources. Tertiary and higher education provides students with better access to basic science, in-depth knowledge, modern skills, and plays a significant role in establishing key institutions. Hence, it is more possible for university or higher-level students to add value to the organizations for which they work in specific and to the whole economy in general.

In fact, Vietnam solely spent 0.33% of GDP on university education while the average expenditure of OECD member countries is relevant to 1.1% of GDP (MOET, 2019). This fraction of Vietnam even fell sharply to 0.23% by 2020 as reported by Deputy Minister of Education and Training Hoang Minh Son. Spending per university student, as a percentage of GDP per capita, is only two-thirds that of general education and one-third that of OECD countries. Therefore, the

financial resources of universities mainly depend on tuition fees (most of the school fees account for over 80%) which is unsustainable.

This level of investment will be a big challenge for reaching the goal of becoming a knowledge-based economy in the future. The high-quality human resource which is the main incentive for economic sustainable growth not receiving a worthy and sufficient amount of capital may lead to a huge demerit that the value-added generated faces the threat of decreasing.

Inappropriate teaching method:

Although the proportion of qualified teachers and lecturers is relatively high and stable growing over years, the teaching methods remain backward, slow to innovate and modernize, not closely associated with social life and professional work; have not brought into play the creativity and practical ability of students. The 11th Party Central Committee held the 8th Conference with the theme of fundamental and comprehensive reform of education, stating the teaching methods of teachers play an integral part in the quality of education.

However, high school teachers keep making use of the traditional teaching method. Teaching process is the one of transferring information and knowledge from the teacher to the learner and, thus, it depends fundamentally on the pedagogical talent of the teacher. The teacher gives lectures while the students listen, record and perceive in a passive way. The pedagogical relationship between teacher and student is a direct, single-line relationship in a straight line from the top down, showing the command-subordination nature. In other words, the teacher is the subject, and the center of the teaching process while the students are the object, considered as the surrounding orbits. Hence, the role of the teacher has outperformed the student's, leading to the lack of friendliness and democracy.

Additionally, the application of information - communication technology, the use of teaching means has not been widely and effectively implemented in educational institutions. This kind of backward teaching method has shaped the short-sighted and passive awareness and thoughts of the students which in turn negatively affects the lifelong learning goal of the knowledge economy.

Alarming rate of unemployed postgraduates:

Approximately 400,000 bachelors graduate per year (GSO, 2019). However, over a quartile of which is underemployed or jobless. Since 2015, the number of unemployed people with university degrees or more is about 200,000 each year. In the first quarter of 2019, the number of unemployed people of working age was 1,059,000 people (MOLISA, 2019). In which, the number of unemployed people in the college level group is more than 65,000 people. The intermediate level has nearly 53,000 unemployed people. The group with a university degree or higher has nearly 125,000 unemployed people. These numbers have exposed the fact that Vietnam's educational system is ineffective in providing students with knowledge and skills required for employment.

At National Assembly sessions, the issue of creating jobs for students after graduation or training human resources is always a matter of special concern to many delegates. This dilemma is caused by an education which is heavily theoretical, backward and does not include career orientation and working skills. The current curriculum is extremely heavy, the current teaching and examination methods are formal, exaggerated, and far from reality, causing suffering for both

teachers and students, making the situation of "fake teachers" and "scholars" unprecedentedly widespread.

This is the explanation for the situation: while we produce a lot of candidates who have won top prizes in international competitions, their performance far outstrips neighboring countries like Philippines, Thailand, Singapore,... but still loses away from these countries in terms of scientific research, especially applied research in practice. Eventually, the national economy may slow down significantly due to the existing barriers in adding value, solving real-life economic problems, and adaptability of people with qualifications or degrees.

Unequal teacher distribution:

The number of teachers is not distributed evenly across the countries and among educational levels. The structure of teachers and managers in educational institutions in ethnic minority areas is still inadequate. This stems from labor migration from rural areas to urban areas and industrial zones, highly skilled and qualified teachers often gather in big cities and key areas. This situation leads to the inequality in access to education among areas and the disparity in economic development among provinces.

At the Conference reviewing the school year 2021-2022 and deploying the mission of the new school year on August 12, 2022, the Ministry of Education and Training revealed that the country has to deal with the shortage of 94,714 teachers at all levels in general. Meanwhile, there is still a surplus of 10,178 local teachers in several areas and school levels. Vietnam has redundant teachers in Math and Literature while lacking teachers for Music and Art at high-school-level as well as for English and Information Technology at primary-level. The shortage of teachers in skill subjects makes the situation of Vietnamese education based on theory and lacking in practicality in real life even more serious.

Lack of quality testing and institutional accreditation:

Accreditation of education quality is necessary and should be done regularly to ensure quality in educational institutions. However, the inspection in Vietnam has not been implemented drastically and has not become a regular activity, more seriously, many places do quality accreditation perfunctorily. Investigation and punishment are not drastic. The policy and document promulgation are slow. Accreditation mainly applies to input factors such as facilities, finance, area,... without focusing on examining the curriculum or the quality of the student's output.

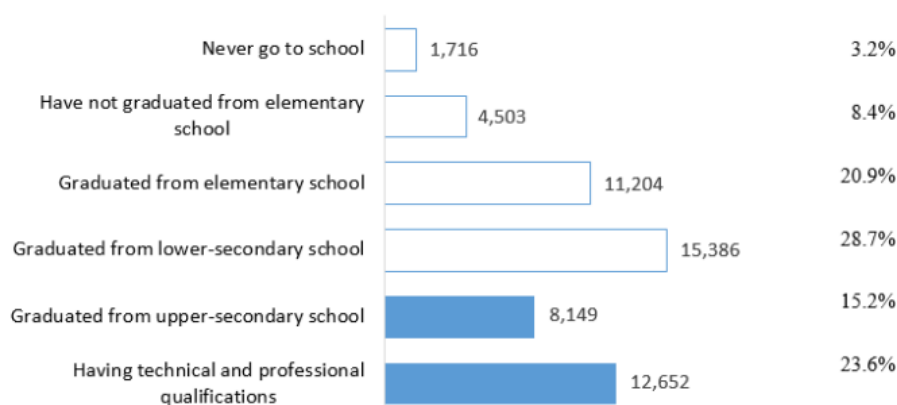
Testing inputs without strict quality control of training programs leads to curriculum not being updated, thereby, learners' skills do not meet the current needs of society, graduates cannot find jobs despite the high demand of corporations for high-quality human resources. This leads to a waste of human resources and inefficiencies in the job market, which is the cause of stagnation in economic growth and development.

Irrational educational structure leading to the surplus of low-skilled workers and a shortage of high-skilled employees with qualifications:

The Vietnamese labor force has 55 million workers, but only 64.5% are trained labor, of which approximately 24% have diplomas and certificates.

Figure 9. Proportion of workers at different level (Unit: thousand persons)

Unit: thousand persons

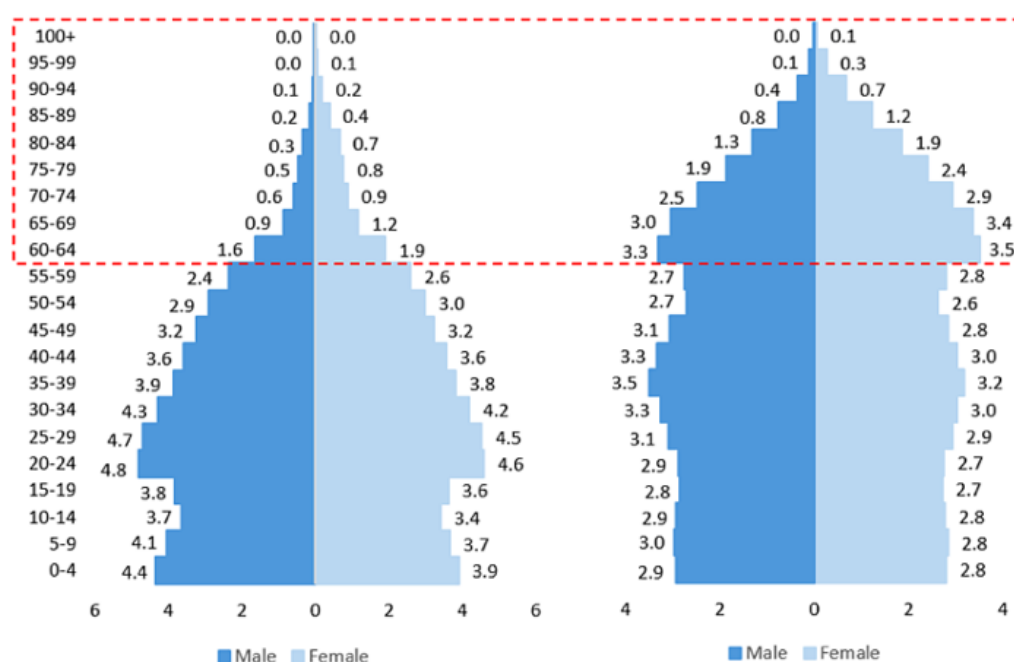


Source: General Statistics Office of Vietnam (2020)

The supply of skilled labor is not enough to meet the rising demand for human resources with specialized vocational skills, which is of great importance for the country's socio-economic development. Among 35.5% of untrained workers and 40% of trained workers without qualifications, the majority will have difficulties in finding a job or they do jobs that do not bring high value to the economy. This is an inefficient utilization of human resources as well as a waste of government spending due to unemployment benefits.

One of the major reasons that Vietnam can achieve high economic growth is the advantage of a golden population, however, if the skills of the workforce are not improved to be suitable in modern context, the growth would stagnate and not be sustainable due to population aging.

Figure 10. Vietnam population age pyramid in 2015 & 2055



Source: Japan International Cooperation Agency

While corporations have a great demand for highly qualified employees and currently are in short supply, the supply of labor is mainly low-skilled, thereby failing to meet business needs. Society has a surplus of workers and businesses have a shortage of employees, but the two sides cannot match.

In addition, low-skilled labor will make Vietnam not an attractive destination for investors since foreign corporations require high-skilled human resources. Currently, the advantage of Vietnam is cheap labor. However, the application of technology and automation makes cheap labor no longer an attractive factor, making Vietnam gradually lose advantage in international trade transactions. These directly affect the national current account, and further hinder the sustainable economic development.

5. Recommendations

5.1. For the government:

Promulgating more attractive remuneration for teachers:

Vietnam has about 16,000 resigned teachers (MOET, 2022). Since the shortage of teachers stemming from low salaries which cannot help teachers to make a living, authorities need to implement better remuneration to retain teachers. Teachers working in remote areas and provinces with difficult socio-economic conditions should enjoy incentive policies, allowances and special treatment.

Applying information technology to allocate teachers appropriately:

Authorities at all levels can forecast demand and develop long-term plans to train teachers in association with social needs. After that, the Ministries can arrange, coordinate, and supplement human resources to provinces and take charge of subjects at all levels that were in short supply of teachers.

Reasonable allocation of state budget expenditure:

The government should allocate the budget for education more rationally when deciding annual state budget estimates. At the same time, the government needs to closely monitor the expenditure for education of 63 provinces and cities, especially those spending less than 10%.

Assign accreditation agencies to be stricter and more drastic in accreditation:

Drastic measures are needed for cases of violations and educational standards not being met, as well as organizing inspection sessions at the beginning of the school year to provide operational orientation and resolve outstanding issues. At the end of the year, accreditation agencies shall organize inspections to evaluate how well educational institutions have satisfied the set of standards.

5.2. For educational institutions:

Innovating curriculum in accordance with the modern context:

The curriculum needs updating continuously to catch up with the development trend of the open economy and the digital age. It is essential to integrate the curriculum with practical knowledge and experiential lessons and avoid teaching only theoretical knowledge.

Improve management capacity, transparency in education activities, enhance explanatory and accountability ability:

In order to be given autonomy, schools and academic institutions must ameliorate their own ability to manage and take self-responsibility in terms of organization, finance, academic activities, and human resources. The report on explanations and responsibilities of the educational institution and each staff or lecture must be made public and in detail.

Study from developed education systems to reform and apply modern, civilized, and effective teaching methods:

Learners should be positioned at the center of education, not teachers and lecturers. It is essential that the current teaching method turn into an interactive and flexible one to unlock the students' potential. Some of the recommended teaching methods to which Vietnam could switch are Learner-Centered, Project Based Learning, Experience Based Learning, Six Thinking Hats...

Pay more attention to the career orientation activities and conduct reasonable student streaming:

Vocational guidance should be carried out to upper secondary school students based on their aptitude. It is essential that education coordinate with other sectors and units to expand the model of cultural teaching combined with vocational training. Moreover, promoting the initiative of management staff, high school teachers and strengthening socialization in career guidance and student flow; forecasting human resources of current and future professions, helping students and parents to have a basis for career choice are things needed.

Extend the opportunities for students to access real experiences:

Education institutions shall promote the connection between students and enterprises. There happens to be a range of forms under which students are connected with enterprises such as: orientation talk show, career fair, internship...

5.3. For households:

Exercise responsibility to cooperate with the society and schools:

Families should combine with the other two pillars to implement Directive 71/2008/CT-BGDDT dated December 23, 2008 of the Ministry of Education and Training on "Strengthening cooperation between schools, families and society in the education of children and students". It is suggested that families keep in touch with the teachers at the early stages of education to keep track of their children's learning status and have solutions in time whenever the children are in trouble.

Spend reasonably on children's education to ensure efficiency and avoid pressure:

Vietnamese families tend to spend a great proportion of their income on their children's educational activities believing that the more the children study, the higher possibility of becoming successful. Accordingly, such reality has weighed on both parents and children. It is advised that parents supervise their expenditure on education, invest smartly after careful research, and find support from educational consultants if needed.

6. Conclusion

In general, it is impossible to overstate the value of education to a nation's economy, especially one that strives for sustainable economic growth. Because it directly impacts a nation's people resources, education will become the most reliable foundation and one of the most significant aspects influencing the development and orientation of a nation.

The government has acknowledged the value of education to the economy. Although education in Vietnam has improved somewhat since the preceding decade, there is still room for improvement in terms of university graduation rates, investment rates, and educational quality. The government itself must take the initiative in finding solutions to these issues. Along with the current policies, we also propose some recommendations for the government, households and educational institutions to further improve education in Vietnam, as well as achieve the goal of sustainable economic development

References

- Barbier, E. B. (1987) “The Concept of Sustainable Economic Development,” *Environmental Conservation*, Cambridge University Press, Vol. 14 No. 2, pp. 101–110.
- Binh Dao (2020), “The Social Science Research Network (SSRN)”, *Journal of Education and Practice*, Vol.11, No.6, Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3686334
- Bộ Giáo dục và đào tạo (2020), “Số liệu thống kê Giáo dục mầm non năm 2019 - 2020”, Available at: <https://moet.gov.vn/thong-ke/Pages/thong-ke-giao-duc-mam-non.aspx?ItemID=7385>
- Bộ Giáo dục và đào tạo (2020), “Số liệu thống kê Giáo dục THCS và THPT năm 2019 - 2020”, Available at: <https://moet.gov.vn/thong-ke/Pages/Thong-ke-giao-duc-trung-hoc.aspx?ItemID=7387>
- Bộ Giáo dục và đào tạo (2020), “Số liệu thống kê Giáo dục tiểu học năm 2019 - 2020”, Available at: <https://moet.gov.vn/thong-ke/Pages/thong-ke-giao-duc-tieu-hoc.aspx?ItemID=7386>
- Bộ Giáo dục và đào tạo (2021), “Tổng kết đề án xây dựng xã hội học tập giai đoạn 2012-2020”, Available at: <https://moet.gov.vn/tintuc/Pages/tin-tong-hop.aspx?ItemID=7376>
- Brundtland, G. H. (Ed.) (1987). “Our common future: The world commission on environment and development”, *Oxford: Oxford University Press*.
- Dinh, T. D. (2022), “Nguồn tài chính, ngân sách nhà nước đầu tư cho giáo dục”, *Luật Dương Gia*, Available at: <https://luatduonggia.vn/nguon-tai-chinh-ngan-sach-nha-nuoc-dau-tu-cho-giao-duc/>
- Đỗ, T.K.T, (2020), “Phát triển bền vững về kinh tế ở Việt Nam – vấn đề và giải pháp”, *Quản lý nhà nước*, Available at: <https://tapchitaichinh.vn/su-kien-noi-bat/phat-trien-kinh-te-ben-vung-o-viet-nam-den-nam-2025-va-tam-nhin-2030-333233.html>
- Đinh, N (2021), “Tác động của giáo dục và đào tạo tới tăng trưởng kinh tế và hội nhập quốc tế”, *Đồng hành Việt*, Available at: http://donghanhviet.vn/news/4304/386/Tac-dong-cua-giao-duc-va-dao-tao-toi-tang-truong-kinh-te-va-hoi-nhap-quoc-te/d,news_detail_tpl
- General Directorate of Vocational Training. (2022), “Việt Nam đang thiếu nguồn lao động có kỹ năng nghề cao”, Available at:

- <http://gdnn.gov.vn/AIAdmin/News/View/tabid/66/newsid/39431/seo/Viet-Nam-dang-thieu-nguon-lao-dong-co-ky-nang-nghe-cao/Default.aspx>
- Global Data Lab. (2022), “Mean years schooling”, Available at: <https://globaldatalab.org/shdi/table/msch/?levels=1+4&interpolation=0&extrapolation=0>
- Harry, A.D., Pham, V.T. & Nguyen, D.T. (2000), “The Economic Case for Education in Vietnam”, *Policy Research Working Paper* 8679, Available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/31081/WPS8679.pdf?sequence=1&isAllowed=y>
- Lan, A., Thanh, H. (2020), “Đầu tư cho giáo dục đại học ở Việt Nam rất thấp”, *Vietnam Journalists Association*, Available at: http://hoinhabaovietnam.vn/Dau-tu-cho-giao-duc-dai-hoc-o-Viet-Nam-rat-thap_n70543.html?page=1
- Lê, P. (2019), “Góc nhìn đại biểu: đào tạo nguồn nhân lực chưa đáp ứng yêu cầu thực tiễn”, *Cổng thông tin điện tử Quốc hội*, Available at: <https://quochoi.vn/UserControls/Publishing/News/BinhLuan/pFormPrint.aspx?UrlListProcess=/content/tintuc/Lists/News&ItemID=42321>
- Mộc, T. (2020), “Giáo dục hướng nghiệp và phân luồng học sinh: Còn khó khăn, bất cập”, *Báo Gia Lai*, Available at: <https://www.baogialai.com.vn/channel/12379/202006/giao-duc-huong-nghiep-va-phan-luong-hoc-sinh-con-kho-khan-bat-cap-5688553/index.htm>
- Ngo, H. D. (2014), “The Role of Education and Training in Human Resource Development in Vietnam: Theory and Practice”, *Journal of Positive School Psychology*, Vol. 6, No. 4, 8393 – 8403, pp. 4 - 6.
- Nguyễn, N.A., Nguyễn, K.T.L., (2018), “Giáo dục việt nam: Thực trạng, cơ hội và thách thức”, *Tạp chí giáo dục lý luận*, Vol. 279.
- Nhật, D. (2022), “Thiếu nhân lực chất lượng cao, Việt Nam sẽ mất dần sức hút đầu tư”, *VnEconomy*, Available at: <https://vneconomy.vn/thieu-nhan-luc-chat-luong-cao-viet-nam-se-mat-dan-suc-hut-dau-tu.htm>
- Oketch M., McCowan T, Schendel R. (2014), “The Impact of Tertiary Education on Development: A Rigorous Literature Review”, *Department for International Development*.
- Oketch, M., McCowan, T. and Schendel, R. (2014), “The impact of Tertiary Education on Development: A rigorous literature review, UCL Discovery - UCL Discodisc”. *Department for International Development (DFID)*. Available at: <https://discovery.ucl.ac.uk/id/eprint/10068500/>
- OECD.org. (2023), “Education resources - public spending on education - OECD data (2022) TheOECD”. Available at: <https://data.oecd.org/eduresource/public-spending-on-education.htm>
- Phạm, M (2021), “Thống kê sinh viên tìm được việc làm sau tốt nghiệp có phải số liệu thật?”, *Giáo dục Việt Nam*, 22 September, Available at: <https://giaoduc.net.vn/thong-ke-sinh-vien-tim-duoc-viec-lam-sau-tot-nghiep-co-phai-so-lieu-that-post221208.gd>

- Phạm, M (2021), “Tiến sĩ Vinh nói thẳng các bất cập trong kiểm định chất lượng giáo dục đại học”, *Giáo dục Việt Nam*, 25 April, Available at: <https://giaoduc.net.vn/tien-si-vinh-noi-thang-cac-bat-cap-trong-kiem-dinh-chat-luong-giao-duc-dai-hoc-post217195.gd>
- Phùng, T.Đ, Nguyễn, T.Đ, Phan, T.T.T, (2021), “Phát triển kinh tế bền vững ở Việt Nam đến năm 2025 và tầm nhìn 2030”, *Tạp chí tài chính*, Available at: <https://tapchitaichinh.vn/phat-trien-kinh-te-ben-vung-o-viet-nam-den-nam-2025-va-tam-nhin-2030.html>
- Robert J. D & Paul, O.M (2014), “The role of education in the sustainable development agenda: Empowering a learning society for sustainability through quality education”, pp. 120 – 124.
- The World Bank. (2022), “Điểm lại: Cập nhật Tình hình Kinh tế Việt Nam, Tháng 8/2022”, Available at: <https://www.worldbank.org/vi/country/vietnam/publication/taking-stock-vietnam-economic-growth-update-august-2022>
- The World Bank. (2022), “Expected years of schooling”, Available at: <https://genderdata.worldbank.org/indicators/se-sch-life/?gender=total>
- The World Bank. (2022), “Expenditure on tertiary education (% of government expenditure on education)”, Available at: https://data.worldbank.org/indicator/SE.XPD.TERT.ZS?contextual=region&end=2013&locations=VN&name_desc=true&start=2013&view=bar
- The World Bank. (2022), “School enrollment (Tertiary)”, Available at: <https://data.worldbank.org/indicator/SE.TER.ENRR?contextual=region&locations=VN>
- Thùy, L. (2019), “Kiểm định chất lượng giáo dục đại học còn nhiều bất cập”, *Giáo dục Việt Nam*, Available at: <https://giaoduc.net.vn/kiem-dinh-chat-luong-giao-duc-dai-hoc-con-nhieu-bat-cap-post202309.gd>
- Tổng cục thống kê. (2021), “Chỉ tiêu cho giáo dục, đào tạo của các hộ gia đình ở Việt Nam những năm gần đây”, Available at: <https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2021/09/chi-tieu-cho-giao-duc-dao-tao-cua-cac-ho-gia-dinh-o-viet-nam-nhung-nam-gan-day/>
- Trần, T.D. (2016), “Đổi mới phương pháp giảng dạy, tiêu điểm của đổi mới căn bản, toàn diện”, *Giáo dục Việt Nam*, Available at: <https://giaoduc.net.vn/doi-moi-phuong-phap-giang-day-tieu-diem-cua-doi-moi-can-ban-toan-dien-post173480.gd>
- Vien Thong (2022), “JICA: Việt Nam sẽ sớm mất lợi thế lao động giá rẻ”, *VnExpress*, Available at: <https://vnexpress.net/jica-viet-nam-se-som-mat-loi-the-lao-dong-gia-re-4505673.html>
- VNA (2022), “Vietnam’s human capital index improves”, *Vietnam Investment Review*, Available at: <https://vir.com.vn/vietnams-human-capital-index-improves-79405.html>
- World Bank. (2021), “Higher Education”, Available at: <https://www.worldbank.org/en/topic/tertiaryeducation>
- World Bank. (2022), “2022 Vietnam Poverty & Equity Assessment from the last ... - world bank”. Available at: <https://thedocs.worldbank.org/en/doc/4849fcf95377cf1482bd9668c4cf05fb-0070012022/original/VN-PA-launch-PPT-ENG-FINAL.pdf>

World Bank group. (2018), “Growing Smarter Learning and Equitable Development in East Asia and Pacific”, pp. 234 - 235.