

## Thailand's Education and the Emerging Disruption

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### Abstract

This academic paper aims to study the relationship and the effect of Thailand's education and the emerging disruption. In this fast-paced world, various sectors have started to be interrupted by emerging technologies and trends in the economy. For example, human labor is starting to be replaced by robotics in the production line in factories. As a result, the education system should be revolutionized by being adaptive and flexible. And keeping up to date with the market demand, in order to produce a quality labor force and reduce the unemployment rate. The research method relies on secondary data which are existing data from previous research, thesis, statistics, interview, and studies from other reliable sources; government reports, university thesis, etc. The analysis shows that collaboration between all stakeholders is essential to build the education system and serve the market needs. The most crucial element in the growth of any firm, everywhere in the globe, is its human resources. Education is one of the key components in producing good human resources for society. If any nation promotes education in the correct way and plans for the efficient production of human resources, the nation will incur the cost of human resources that can work together to move the nation ahead.

*Keywords:* Education, Human Resources, Disruption

### Introduction

Human resources are the most valuable factors of society and the country. The nation with high potential human capital that can be used for creative benefits will result in a positive outcome. And that country will progress and have wealth and stability in both the social, economics, and politics. But, if the country is lacking in human resources or unable to bring out the use of potential from their citizens, it can be challenging to develop the nation. The progress or backwardness of the country, therefore, depends mainly on human resource factors because it is the main player contributing to development. Other factors contributing to the development of the country, whether in terms of social, economic, or social all come from human resources. Effective human capital with a good management system will lead to creating maximum benefits for the country. We can say that human capital is vital because it includes human skill, intervention, thinking, and information, which drives a country's strength, and since a country's improvement often depends on it.

To improve human resources, we should focus on producing a high-skill labor force to cope with/ prevent technology disruption by AI and robotics. According to a report by Mckinsey Global Institute, it is estimated that about half of the work activities that used to be employed will be replaced by

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automation. In addition, many countries around the world face the problem of the inability to build young people with work and life skills that are high enough to face working in the era of technology that changes the world. Forcing us to prepare the labor market, Thailand's education and training to cope with changing job conditions, and the demand for skills of the workforce of the future. At Techsauce Global Summit 2019 titled "The rise of Artificial Intelligence, The coming Disruption for Jobs, The economy and society by Martin Ford. He said that ultimately machines will not be able to replace humans at all as many fear. But we also have to try to develop skills to work on things that technology is unable to do. (Techsauce Team, 2019) For instance, work that requires creativity, bringing the results of analysis into planning, or even sales services and IT jobs that will design and maintain various technologies.

One of the ways to improve human resources is to revolutionize the education system by developing and promoting both academic and vocational studies. The most important thing is the demands of the labor market, which change with the advancement of technology and social change make both learners and educational institutions adapt to accommodate the labor market, including consistent with the interest of the learners. While many countries overlook vocational education with social values they often view vocational education as having no dignity equivalent to studying in the academic course (high school diploma) or it is just a source of support for high-end students who are unable to pay for post-secondary education. However, Germany, Singapore, and South Korea have chosen to promote vocational education as the "Backbone" of the country's development.

To continuously promote sustainable development in all dimensions we must integrate lifelong learning into the education system and as a social norm. By being fast, adaptive and self-motivated by practicing lifelong learning. It might be another option that will enable skill development and upgrading to be effective and prevent disruption.

### **Research Problem**

According to a report from UNICEF, the 15-Year Free Education Scheme accounts for 18 percent of Thailand's education budget, equivalent to more than Baht 90,000 million. (UNICEF, 2011) There seems to be a mismatch between input and output; money and education outcomes by not being an efficient and effective use of resources. According to data from the OECD 2018 report, the 10 countries with the highest expenditure on education relative to GDP are Norway (6.6%), the United States (6.1%), South Korea, and Thailand (5%), and the national average for OECD is 4.9%. When comparing the educational budget to the total budget, Thailand is considered to have invested in education at a higher rate than many other countries. With the World Bank report in 2018, the top 10 countries with the highest percentage of spending on education relative to the total budget were Malaysia (19.7%), Thailand (17.2%), Finland (12.3%), and Germany (10.9%). (Kolev & Tassot, 2016)

The above information would imply that Thailand spends its money on higher education. But there are still clear disparities such as quality and access to education. Whether it is students who have dropped out of the education system, vulnerable groups (children), teacher systems, etc. Nevertheless,

when compared to countries with similar expenditures like South Korea, or countries with a lower percentage of spending on education but more efficient like Finland- compare by Programme for International Student Assessment (PISA). Therefore, it can be concluded that Thailand has more expenditures on education than its neighboring countries. Considering the scores from PISA, it is found that the reading and critical thinking skills of Thai children were lower than the international level. The so-called continuous and also see the disparities in education both in terms of opportunities and quality of learners. The National Education Account of Thailand (NEA) suggested that the system should be adjusted on the academic course budget per head. It does not mean that all students must be paid the same amount; trying to promote justice in the system. But take into account the student's needs and differences in location and lifestyle which have different costs of living, including in accordance with school size. (NEA, 2020)

Apart from inefficient money allocation in the education system, the education system is being lagged due to fixed educational programs. When looking at the Thai education system at the general high school level. There are usually two main learning plans, namely science-math and social studies-arts, resulting in students having a limited set of frameworks to choose from. And students might miss the opportunity to discover their talents and preferences on what suits them most. But if we look at the education system of some countries. Many have made efforts to focus on students as the center of education by giving them time to find themselves through a personalized curriculum. This leads to setting up a curriculum that will answer the students' needs which will help guide the way to engaging learning with the freedom to choose based on students' interests. For example, in Switzerland education gives schools autonomy to organize a curriculum that is appropriate for the child. It is one of the top five ranked with the best education systems in the world. Switzerland is decentralized to state schools with the responsibility to administer the curriculum at the kindergarten, primary, secondary, and university levels. Even though they are in the same country, the course details and teaching differ from state to state as well. At the secondary school level, there are three types of learning styles, depending on the students in each state which are more suitable for the management style, namely separated, cooperative, and integrated models. The high school level, this level is separated between students who wish to study general and vocational courses. General students can choose to study in a preparatory school or a specialized school. As for vocational courses, they will go directly to the vocational education system instead. Vocational schools are suitable for students preparing for specific entry into higher vocational colleges and the University of Applied Sciences. The fields of study are health, social work, design art, etc. Which takes a total of three years, where approximately two-thirds of Switzerland's students enter this level of study. We can see that they are not separating or reducing the dignity of vocational education students, but instead, it is popular among their citizens.

An article from UNESCO stated that Thai youth face a similar situation, as approximately 520,000 new graduates are likely to encounter difficulties as they enter the job market. The transition already underway in Thailand toward emerging technologies requires that these young people and adults upskill,

or reskill, to meet new business demands. (UNESCO, 2021) As a result, to accommodate the sudden transformation and global crisis as well as the global situation that affects the need for manpower and new learning styles. Therefore, it needs a system to promote education and lifelong learning that allows people to develop their skills to keep up with the changes throughout their lives.

### **Theoretical Framework**

The National Education Plan was created as a response to the dynamic challenges of the 21st-century world, both in terms of external pressure: changes in the global economic and social context due to the digital revolution and changes to industry 4.0. Moreover, to achieve the United Nations Sustainable Development Goals 2030 that Thailand has ratified. Including the impact of being an ASEAN community and the need for skilled manpower in the 21st century coupled with domestic pressures from changes in the population structure that resulted in the country entering a fully aging society shortly, being trapped in middle-income countries, etc. Including the education system that still has many problems, since the quality of graduated students and educational management standards at all levels. This affects the education system which must be adjusted to meet and accommodate the challenges. As such, Thailand must reform the education system which is the main mechanism of driving the country. The Thailand 20-year National Strategic Plan of the 12th National Economic and Social Development Plan to lead the country towards stability, prosperity, and sustainability in the next 20 years.

The direction of economic and social development of the country focuses on human development including policies aimed at becoming Thailand 4.0, government policies on manpower, the 20-year National Strategy, and the 12th National Development Plan require the country to adjust its development direction to increase competitiveness through more innovation and to develop people with knowledge, skills and specialize. In addition to, Sustainable Development Goals that Thailand tries to achieve Education for Sustainable Development (ESD). Which is to empower learners to make informed decisions and act responsibly for environmental security, economic survival, and social justice for human beings now and in the future and respect for cultural diversity. In addition, Conceptual Design is promoted according to the National Education Plan as it is important in education management consisting of principles of education for all for equality and inclusive education and adhering to the SDGs 2030 on local issues such as the quality of people of all ages, changes in population, the structure of the country, income inequality, and environmental crisis by adopting the National Strategy becomes an important conceptual framework in the preparation of the plan

Thailand 15 years free education is the policy of free education for 15 years with quality services. It is a project that the government encourages people to have equal opportunities for basic education at no cost. The goal is to promote basic education and reduce the parents' burden on education costs. From the information above, we may relate Thailand 15 years free education to SDGs #4 Quality Education as it has a similar objective which is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

### **Research Methodology**

In this paper, both qualitative and quantitative data have been included as readings for the literature review. And fully rely on secondary data which can be referred to the reference section. Quantitative data is to seek facts and quantitative conclusions. Emphasis is placed on the use of numerical data such as evidence for the validity of findings and conclusions, for instance, questionnaires, tests, observations, interviews, experiments, etc. This type of data is based on positivism, whereas the search for truth through quantitative research requires scientific processes or methods based on empirical data and methodical procedures. The case of quantitative method research study starts with a rule or theory first. The empirical data is then collected and analyzed using inference and summarized as findings. In this paper, quantitative data are considered from education costs of the whole country to critique the effectiveness when using resources and resource allocation. For instance, despite having a 15-year free education policy across the country, in the Bangkok area, it was found that children had an average educational expenditure of 37,257 baht per person per year. Of these, 26,247 baht are tuition and fees, while the rest are 2,072 baht for clothing and uniforms, 2,175 baht for books, stationery, and equipment, and 6,763 baht for travel expenses. These average figures are higher than all areas in Thailand. This is twice the national average cost of 17,832 baht per person per year. We can see from the data that we should fix the system with an equity or justice approach to ensure that all students are having access to quality education. On top of that, this paper also considered the PISA score, and national standard test and later found out that there is a mismatch between the amount of budget spent and the outcome when compared to neighboring countries that have a similar amount of budget.

While qualitative data is research, researchers must study and observe groups of people who want to study in detail in every aspect in an in-depth manner. By using a participatory observation method and informal interviews as the main data collection. Data analysis uses rational analysis, not numerical purposes. Qualitative research is based on naturalist philosophy, therefore, the search for truth through this type of research focuses on phenomena occurring in natural circumstances, which is sometimes called Phenomenalism and relies on the method of depiction. For this paper, data are collected from interviews and opinions from parents and students about the policy as they are the main users of this policy.

### **Analysis and Findings**

Education is an investment, a belief stemming from the problem of social inequality from the opportunity to access education and have a stable career until income generation. If two children are in the same education system, but with different socioeconomic statuses, there may be gaps between them from the beginning even though education should be equal welfare for all. The government should encourage free education that is accessible to all. In the United States, there is a Free Community College policy that focuses on supporting the working class to access higher education by increasing the tax rate of high-income people to support education. The average student at a local college is 28 years old and

has both the burden of tuition and family expenses. Supporting costs during the COVID-19 crisis is essential to keep those students out of the system. Everyone should have access to a free education because it is an important tool to help bridge the gap in economic inequality. Especially in an age where technology is replacing human labor, therefore, it is necessary to increase labor skills through education. Because there are still many occupations that technology cannot replace and require a high level of skill and benefit receiver is not only limited to students who receive free education but also the economy and society. Furthermore, it helps to increase the wage rate in society as a whole, this is because the number of workers who have graduated from higher education has also increased. Supporting education is therefore both a matter of reducing inequality in the quality of labor in the economy and the quality of life of people in society.

Thailand still faces the problem of inadequate basic education management. Especially at the early childhood level where students have a lot of opportunities to drop out of the education system. And the likelihood of children going to graduate school is even less compared to developed countries like the United States and Australia. However, the government continues to recognize the importance of and try to come up with policies that help children to have greater access to education. One of them is “15 years free education”, but the effect of the policy is not as successful as it should be. The model of implementing the free education policy is an allocation operation. The policy should be prioritize as it is one of the main focus referring to Thailand National Strategy and is correlate to SDGs #4 Quality Education as it has a similar objective which is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This results in inefficient distribution of resources because it focuses on horizontal fair distribution rather than vertical fairness, that is per capita budget allocation. More than truly personalized support resulted in solving problems that did not reach the target audience group. In addition, when the policy is put into practice in each school, it is not in the same direction because there is no instruction manual clearly and it depends on the discretion of each school itself. It is also pulling teachers out of the classroom (not being able to teach at their maximum potential) due to an insufficient number of teachers, making them overloaded with jobs. Overall, the implementation of the free education policy in Thailand still has weaknesses in the management system. Particularly the distribution of resources is a problem that is consistent with other problems in the Thai education system for a long time.

The free education policy should be continuously developed to make education become a fundamental benefit that is truly accessible to everyone. The first is to develop an information system used for managing each school’s information so that resources can be allocated to students in vulnerable households. Then a clear operation framework is established to support the financial management skills of personnel in schools and focus more on specialized support assistance, this will help to distribute resources more fairly. In addition, the development of education should allow more opportunities for the public sector to participate because schools and communities can work together to help strengthen the education system both in terms of quantity and quality. Implementing the 15-year free education policy

should be supported as a per capita expense according to the specified rate. Through a deduction payment to the student account, which is paid directly by the government like Half and Half by the register of a 13-digit identification number and school confirming letter that the student is still enrolled in school as proof of receiving money.

From going through articles and research, it shows that education plays an important role in the Thai labor market (quality), which directly contributes to economic development through purchasing power and the ability to generate income for the country. When it comes to the problems in the Thai labor market. One of the main issues is the lack of quality labor because the skills of workers do not meet the needs of the market, especially the industrial sector like the automobile, which is one of the most important sectors, which requires vocational workers with skills and expertise in various fields. As a result, the problem of unemployment arises while the industrial sector faces labor shortages. The reason for the inconsistency in labor market demand and supply is due to the quality of teaching and learning, and the content of the curriculum that has not kept pace with the changes in the world in the 21st century, as well as social values that value the importance of studying in general education rather than vocational.

Therefore, most people prefer to study in general courses that are theoretical learning rather than practical. As mentioned in the earlier section, while many countries overlooked vocational education some countries were giving importance to this type of education. The success factors are due to several factors; first, the production of personnel in line with the country's economic and industrial development strategy through cooperation with all sectors, both the government, education, and business sectors to obtain courses that can produce labor that meets the needs. Second, developing skills through real-world learning, such as a dual education like Germany, which is a theoretical study coupled with practical training. Third, the development of knowledge skills endlessly (lifelong learning) to keep up with a rapidly changing world, such as Germany's Continuing Vocational Education Training (CVET) program and Singapore's SkillsFuture Program, which is a collaboration between educational institutions and businesses to design short-term courses for workers looking to enhance their new work skills. And lastly, attitude adjustment towards vocational education through the development of curriculum, tools, and teaching methods to be accepted internationally, and in public relations to create a new image for vocational education.

Like Singapore, the strategy of vocational education must change according to the national economic strategy. The Singapore government has recognized the importance of developing people in the vocational system since the founding of a new country. Because it is necessary to produce labor in line with industrial development until the birth of many vocational schools with training centers. Through the assistance and cooperation from foreign countries such as England, Germany, and France.

Another idea is to develop personal skills for investment in 12 target industries in the EEC area or another business sector. It is expected that there will be a high demand in the next five years, therefore, education guidelines and personnel skills development should be developed under the concept of the

EEC model to be used to develop personal skills in the area. To create teaching management to match the job position (Demand- Driven Education) that focuses on meeting the needs of the market. By bringing in the private sector to participate in education, from the design of the course to the hands-on internships in the factory as well as monetary fund support so that the graduates can work immediately. To enhance the income and livelihood of people in the area sustainably.

### **Policy Recommendations**

Thailand's 15 years free education program is trying to provide accessible and equitable education to all students and reduce parents' burden on paying school fees and supplies. However, due to the lack of local readiness in the management of early childhood education. Children who attend compulsory education are therefore dropping out and some students are avoiding vocational education as it is perceived by the society with the bad reputation. The provision of education services to the underprivileged is not yet comprehensive. There is no clear mechanism for promoting education for children with disabilities. Moreover, there is a lack of knowledge and tools in management, causing policy problems such as corruption on school supplies, school uniforms, fees on student quality development activities. In addition, it was found that many schools do not meet the standard and requirement set and the learners had low learning achievement, lack of desirable characteristics, both analytical thinking and eagerness to learn as well as continually seeking knowledge, morality, and ethics. There was a shortage of quality teachers and the distribution of administrative power into education still doesn't meet the goals. A committee should be set up to oversee, manage, and monitor corruption issues. Budgeting is systematic and rigorous, much like observing how the government is using its authority. There are presently steps being done to stop additional corruption, and if it does happen, it will be easy to acknowledge. Apart from corruption and inequality, the most important part is quality education. We have to ensure that students that graduate meet the labor market needs and are highly skilled.

It is undeniable that unemployment is one of the main problems in the labor market. Referring to the data from the Office of the National Economic and Social Development, Thailand's unemployment rate in the first quarter was 1.96% about 750,000 people. But having unemployment is not related to the absence of vacancies in the labor market. Because a certain number of people are unemployed or unable to find work on the employer's side, especially in some business sectors. Instead, they have a problem of shortage of workers, most of the business sectors that are facing these problems are industries that require skilled labor. The obvious thing is Thailand does not produce enough vocational learners. After finishing junior high school many Thai students turn to general education to attend university. As people perceive that higher education teaches us more about learning theory rather than putting into practice its reputation. This leads to the problem of a shortage of skilled workers that employers want.



We can conclude that to improve the education system in Thailand, we will need to reform transparency in the education system to prevent corruption and misuse of money, and inefficient resource allocation. In addition, curriculum reform needs to be considered as a student-centered curriculum. Where students are allowed to choose courses according to their aptitude of interests, meaning that the level of academic intensity depends on the abilities of each student. For example, students have the option to choose from an academic track like physics, chemistry, calculus, or English literature, and a career track like accounting, economics, automobile engineering, woodworking, etc. This idea is developed from my personal experience when studying in Canada after graduating. I found that economics, psychology, and automobiles are subjects that I enjoy and have outstanding performance the most. As a result, in post-secondary education, I chose according to my interests and performance with a clear goal for my future career path.

### Conclusion

Human resources are the most important factor in the development of the organization in the country and the world. In order to create quality human resources in society, one of the important factors is education. Education, in addition to enabling human knowledge and self-development, can also determine the direction of the country. Because if any country has the promotion of education in the right direction as well as planning efficient human resources production would cause the country to have the cost of human resources that have the potential to jointly build the country forward. That includes a sub-unit like an organization that, if selecting quality human resources to work, will result in the organization's development going forward as well. At the same time, we should not cease to develop knowledge for ourselves because education is never-ending, anyone can always learn and self-develop.

Thailand's 15-year free education relies upon the National Strategic Plan and Sustainable Development Goals by investing in human capital. And ensure that children have access to education and can fully develop regardless of their gender and religion. To make development sustainable we should fix the problem from the root cause, which is to make education system funding transparent that allows anyone to see monetary activities. Education should aim to produce highly skilled labor that receives high income and generates more money in economics. And promote lifelong learning to motivate all citizens to keep developing themselves to prevent any disruption that will occur in the future and increase their living standards. The most important goal of education is to ensure that citizens can stand on their own feet, and be able to take care of themselves and their families. As mentioned earlier, in another country there is a vocational institute collaboration with businesses. Forms of participation in private groups it is not only about co-directing the course and accepting students for internship, but also being involved in comprehensive funding and resources for teaching and learning technical support. This gives education institutions more funds and resources to operate and improve the quality of education. We can conclude that this is a possible way to ensure that students will not only receive an education that is up to date but also to ensure that they will meet the needs of the labor market and will have job opportunities.

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