

## **Education Challenges to Thailand 4.0**

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### **Abstract**

The article provided framework of Thailand 4.0 which is a new economic model for Thailand. Thailand needs education reform to pull the country out of the Thailand 3.0 trap. The education challenges to Thailand 4.0 were also pointed out. Poor quality education and education inequality are two main educational problems which need a serious consideration.

**Keywords:** Thailand 4.0, Education Challenges, Poor Quality Education, Education Inequality

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## Introduction

Thailand 4.0 was launched by the government in May 2016. This policy is expected to complement the wider 12<sup>th</sup> National Economic and Social Development Plan, for 2017–21, and fit more broadly within the government's new 20-year National Strategy. Thai government has set out three objectives for the 4.0 strategy: to elevate Thailand to the status of a high-income nation; to reduce inequality; and to promote environmentally sustainable growth and development (The Economist, 2017).

In order to achieve three goals mentioned earlier, stakeholders need to realize factors affecting the goals. One of the main factors for Thailand 4.0 achievement is education. There are some education challenges that require serious consideration.

## Thailand 4.0

According to the research paper of Jones and Pimdee (2016), Thailand 4.0 is a new economic policy to help the country to step out of the economic trap and move the country forwards. In the government's perspective, Thailand has been developing its economic model continuously through three eras

The first period of economic model is Thailand 1.0. Agriculture played an important role in this stage. Thai people mainly generated their income by farmland and livestock.

The second stage is Thailand 2.0. As outcome of the industrialization, it is about light industries with low labor cost such as garments and food processing. During this stage, Tools were used in most economic activities. The country started many light industries which emphasized domestic manufactures to serve the domestic needs. This model developed the country's economy from the low-income to middle-income nation.

Thailand 3.0 is the current economic model of Thailand. As result of the globalization, this third model is currently more relying on foreign technologies and focusing on heavy industries and exports.

Although Thailand has been in the stage of Thailand 3.0 for years, it cannot move forward. The government claims that the middle-income trap is the main obstacle that makes Thailand stuck; growing disparities and imbalanced developments are also major concerns (Yoon, 2016). The transition from 1 to 3 was a fairly conventional and smooth evolution that didn't require a huge leap in development. But, as most advocates suggest, the jump from Thailand 3.0 to 4.0 is a major challenge that can't be achieved through traditional thinking or conventional action.

Thailand 4.0 focuses on a value-based economy, as the country needs to deal effectively with disparities and the imbalance between the environment and society. Prime Minister General Prayut Chan-o-cha explained that Thailand 4.0 has three elements, which mark a significant change in the country's economy and production.

The first element aims to enhance the country's standing to become a high-income nation through developing it as a knowledge-based economy, with an emphasis on research and development, science and technology, creative thinking, and innovation. In the second element, Thailand will move toward an inclusive society with equitable access to the fruits of prosperity and development. The third element focuses on sustainable growth and development in order to achieve economic growth and sustainable development without destroying the environment.

The Thailand 4.0 is a policy drive, aiming at setting up a sustainable Thai society, the social equality and a low level of inequality. It is a policy which aims at developing the citizen of Thailand with analytical thinking, innovative, open minded and contribute in fellowship to the society. It is also a policy which aims at all levels of Thai people, to be able to create or innovate value for the products and services, with the importance of sustainable development goals in all dimensions (Puncreobutr, 2017)

In an aspect of industry, The Office of the Board of Investment (2017) and Jones and Pimdee (2016) points out that Thailand 4.0 is focused on 10 targeted industries, which can be divided into two segments; developing existing industrial sectors by adding value through advanced technologies for five industries: next-generation automotive; smart electronics; high-income tourism and medical tourism; efficient agriculture and biotechnology; and food innovation. The government has targeted five additional growth engines to accelerate Thailand's future growth: automation and robotics; aerospace; bio-energy and bio-chemicals; digital; and medical and healthcare.

At present, the economy of Thailand is undergoing transformation. There are a lot of wide array of information and communication technology which play an important role in real life. The key success of transformation is learning a new technology, so education play an important role in this part.

Education plays an important role to produce the high quality workforce for those ten targeted industries. Therefore there are education challenges for everyone to rethink before going further. Puncreobutr (2017) point out that the important factors to make Thailand 4.0 achieve a success is to deliver the knowledge to the society, to enable the people to be aware, to realize the value and to participate in the development drive and monitor the mechanisms. Educating the people in Thai society inevitably must come from joint participations and cooperation of the education institutions, together with the other concerned organizations.

## **Education Challenges**

Fernquest (2017) states that politicians, policymakers and the public have all recently given much attention to the government's Thailand 4.0 economic model. However, in order to achieve the goal, there are some factors to take into consideration. Officials and industry analysts have expressed their doubts based on several factors, including the quality of education.

To provide framework of Thailand's education, Santiboon & Ekakul (2017) point out that education in Thailand is provided mainly by the Thai government through the Ministry of Education from pre-school to senior high school. A free basic education of twelve years is guaranteed by the constitution, and a minimum of nine years' school attendance is mandatory. Basic education and the school structure are divided into six years of primary education and six years of secondary education, the latter being further divided into three years of lower- and upper-secondary levels.

In an aspect of education outcomes, Even though the government increase spending for the access to secondary and tertiary education compared to competing countries, the graduates are not competitive and therefore get a low rank in Asia. The outcome shows that Thais are lagging in mathematics and science and innovate less than countries with comparable education. Thailand's universities show persistent quality weaknesses, especially in the R&D field which is important for new thinking and therefore for Thailand 4.0. The result is a skilled labor supply shortage and just a few start-ups from university graduates. Another reason is little communication and collaboration between universities and the industry (Habig, 2017).

Two main problems causing the unsatisfied outcomes are poor quality of education and education inequality.

## **Poor Quality Education**

Ken (2017) proposed that Thai education needs an entire rethink. It requires transformation based on many poor outcomes.

### **Poor English Language Teaching**

English language is an important tool to drive Thailand 4.0 but an English language curriculum fails to produce English competent students. Compared to neighbouring countries, Thailand is in low ranking.

### **Low Global ranking**

Thailand's educational system is ranked 35th among 40 countries included in the 2014 report entitled "Learning Curve, Lessons in Country, Performance in Education" published by Pearson Education. In the latest Programme for International Student Assessment (PISA) score results in 2016, Thailand is ranked 55<sup>th</sup> out of 72 countries in the overall results. In maths and science, Thailand is

ranked 54<sup>th</sup>, and 57<sup>th</sup> for reading (Fernquest, 2017).

### **Lack of the 21<sup>th</sup> Century Skills**

According to Puncreobutr (2016), many of 21<sup>th</sup> Century Skills is essential to search a new approach and ways in learning styles. It seems many people who related to education system are poor of 21<sup>th</sup> Century Skills such as 3R, 3I and 3P. This kind of skill will allow people have the ability to seeking the possibilities in innovative design, selection of the best way to produce, and leading the most worthy way that help to gain benefits from the innovation.

### **Education Inequality**

Education inequality is the main problem which Thai people encounter throughout the country. Inequality is spanning in Thailand due to the gap of economic level among Thais.

Fernquest (2017) stats that Thailand's education is lower than the global average, as well as the increasing inequality in the all educational settings.

### **Most Students Were Left Behind**

Education system is currently focusing on brightest students from a few select schools while slow learners from most school are hidden and left. When parents and community do not expect much from those low proficiency students, it is a challenge to prepare them to become skilled and competitive workers for Thailand 4.0.

### **15,244 Small Rural Schools with Less Than 20 Students**

Small schools in rural areas continue to be the majority of Thai schools though the number of them has declined by more than 20% since 1993. Education inequality problem is more pressing for small primary schools and secondary schools. Small schools lack sufficient state funding due to the number of students. A few teachers need to work hard in order to maintain the quality of teaching and the performance of students.

### **Big Schools Are Better Than Small Schools**

With the low inputs, students from small schools get lower scores than students from bigger schools. According to the 2012 international PISA scores, students from big schools in cities achieved greater scores than small school's students. Big city schools improved at the rate of 21.3% from the last test. Small city schools fell behind with only a 16.1% improvement.

Rose (2014) support that different schools have a different classroom system and management. This leads to a knowledge delivery system, as a system that values anything. With a size of school that mean they have a lot of enrolled students and it is related to education budget, therefore, it seems big school will have more budget to spend in the system compared to small schools.

### **Inequality in Higher Education**

The problem of education inequality goes beyond basic education. It transcends to the level of higher education as well. While the media has reported much on the low ranking of Thailand's top universities compared to international counterparts, a more serious problem lies in the disparity between different educational institutions in the country. With more than 173 higher education institutions, only a handful of institutions continue to capture the imagination and aspiration of Thailand's top students. This leaves a huge gap in student quality among different institutions. Cruces, Domenech and Gasparini (2014) support that there are lots of factors that caused the inequality in education, such as income, gender and so on. In addition, there is a correlation between income and education inequality.

Meanwhile, the state's policy on higher education has mainly focused on making the top universities more competitive. While the competitiveness of higher education institutions is important, attention and resources should also be given to lower-ranked ones including Rajabhat universities.

In aspects of budget, the state's budget allocation for limited admission universities is 10 times higher than that given to Rajabhat universities. The different level of resources that go into different types of universities ultimately creates inequality in students' performance.

### **Conclusions**

Thailand 4.0 is an economic model that aims to free the country from several economic challenges resulting from past economic development models which place emphasis on agriculture (Thailand 1.0), light industry (Thailand 2.0), and advanced industry (Thailand 3.0). At present, Thailand has been stuck in a middle-income trap for over 20 years already. There is now a serious need for Thailand 4.0 to push the country becomes a high-income country.

The 4.0 model aims to develop Thai economy into an innovation-driven nation. To make a country more innovative, a reform on various issues is needed. Education is one of those crucial factors. With many educational problems such as poor quality and inequality, Thailand needs education reform. It needs to give greater and more serious attention to the inequality spanning the education system. If reform is not undertaken to better educate the Thai workforce from a young age, Thailand may well enter a period of long-term decline and economic stagnation. There is no shortcut for Thailand 4.0. If Thailand is committed to achieving Thailand

4.0, it needs to get the basics right.

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