



## Education

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### *Towards a Growth-Sustaining Education Sector*



*Continued economic growth in Thailand will be determined by increased productivity which in turn will depend on how Thailand manages to improve the skills of the workforce. Lack of skills constitutes a major constraint for productivity growth. A strong education sector is crucial for the production of those skills. Successes made in expanding access to education in Thailand will be overshadowed if too few students acquire the cognitive skills needed for the modern labor market. In building a 21st century education system it will be key to reduce the disparity in education quality and outcome across the country and bring learning outcomes of the whole country up on par with those of high performing Bangkok. This can be achieved through measures for (i) increased social accountability in the education system through the annual publication of performance reports and school resources; (ii) improved teacher supply and quality through selection, professional development, and the linking of remuneration with performance, and; (iii) institutional reforms through the integration of functions across agencies within the education sector as regards to budgeting, monitoring and evaluation, administration and finance.*

### **Education and Growth in Thailand**

Thailand's growth over the past 25 years has been driven primarily by an expansion of employment in the industrial sector and capital investment. Productivity gains have been relatively small, with total factor productivity accounting for only one-sixth of the annual growth rate between 1985 and 2005. Less than one-tenth of the growth can be attributed to human resource improvements. With the emerging decline in labor cost advantages and the gradual appreciation of the Thai Baht, high growth in the future will depend on workforce productivity.

Enterprise managers perceive shortages of skilled labor as Thailand's top constraint to growth. The

2011 Doing Business data ranked Thailand 19th out of 183 countries for ease of doing business. The 2007 Productivity and Investment Climate Survey (PICS) indicated that Thailand is well placed in terms of infrastructure, regulation and other objective investment climate measures. However, its traditional labor cost advantage is being eroded by faster growing countries and skill shortages have become Thailand's biggest obstacle to doing business. In 2007, firms perceived skills and education of available workforce as the 4th most serious obstacle to doing business in Thailand. About 40 percent of firms reported skilled labor shortage as one of their top three constraints to doing business. This is significantly more than in comparator countries, including China, India, Indonesia, Korea,

Malaysia, and the Philippines. Nearly all firms surveyed in Thailand ranked lack of skills in English and IT as the most serious gap, followed by weaknesses in numerical and technical skills, and generic skills such as creative thinking and problem solving, leadership, and communication.

The Thai government recognizes the importance of nation-wide improvements in education for the country's future development, and has since 1999 engaged in efforts to improve the country's education system through successive National Education Reform plans, which are now in their second decade. The aim of reform initiatives has been to modernize the system so that it produces as workforce with better labor market and income prospects. The government's reform plan has been centered around four pillars: increasing the focus on quality of education; improving teacher's capabilities; modernizing schools and learning centers; and improving educational management. Short-term measures include increasing the focus on technical and vocational education, as well as English and science, technology and mathematics. Better results in math, science and IT in basic education would facilitate stronger technical higher education, research and innovation as well as improve the ability of Thailand's future workforce to adopt and facilitate technological change throughout the domestic economy. In addition, as part of Thailand's broader development agenda, the government has increased interventions to address iodine deficiency.

### A Framework for Improving Skills Development at Every Step

The World Bank describes the Steps towards Employment and Productivity in a framework of five stages (see Figure 1) starting from pregnancy and early childhood to labor market mobility and job matching.

A recent World Bank study found bottlenecks at each step of this process. In building the foundation for skills development, a uniquely serious problem in Thailand is iodine deficiency, which erodes intellectual capacity of children and negatively affects their learning and productivity later in life. By school age, ensuring that children attain a quality basic education remains a challenge illustrated by relatively weak student performance in tests. The

generally weak and uneven quality of early child development and basic education across Thailand contribute to the structural imbalances in upper secondary and post-secondary education, including low enrolment in science and technology and inequity in tertiary enrolments. Moreover, while labor mobility and job matching could be strengthened by providing quality assurance through a stronger accreditation system and entrepreneurship and innovation could be strengthened through better linkages between industry and training centers, the success of these reforms really hinge on the ability of the education sector to produce job relevant skills and the prerequisite cognitive skills.

Figure 1: Steps towards Employment and Productivity

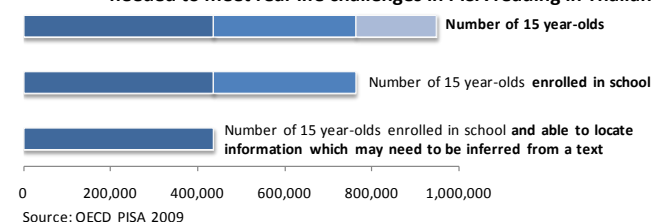


The Skills towards Employment and Productivity (StEP) framework helps policy makers identify bottlenecks in the production of needed skills from pre-natal to life-long learning

### Struggling with Quality

While Thailand's education sector has been very successful at getting children enrolled up to high school, many of them have not obtained the skills and knowledge needed to meet real-life challenges.

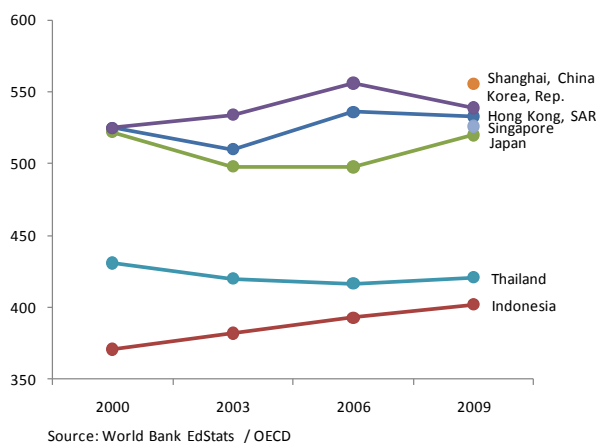
Figure 2: Number of 15 year-olds obtaining the skills and knowledge needed to meet real-life challenges in PISA reading in Thailand



Thailand has participated in international measures of learning performance. The OECD's Programme for International Student Assessment (PISA) revealed that, while 80 percent of 15 year-olds in Thailand are still in school, only 46 percent of them are able to locate information which may need to be inferred from a text, signaling low levels of functional literacy.

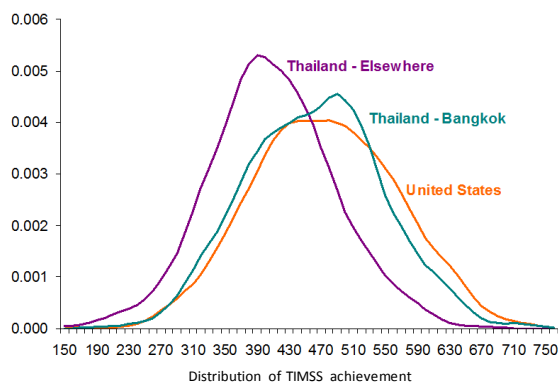
The ability of Thailand's youth to use their knowledge and skills to meet real-life challenges has stagnated over the last decade. Thailand's achievement in reading, as measured by PISA, declined consistently from 2000 to 2006 and only a slight, though statistically insignificant, increase is apparent from 2006 to 2009.

Figure 3: Reading Performance in PISA overtime in East Asia



Low achievement in Thailand is primarily an issue of disparity in learning outcomes. While the distribution of learning achievement in Bangkok is almost identical to that of the United States, the problem lies in areas outside which lag behind the city. Much of the difference in learning between urban and rural areas, for example, is attributable to differences in the quality of education children receive and not just to their socio-economic background. Public funding for schools follows a funding-formula based primarily on level of education and the number of students. However, public education expenditures per student at the provincial level are positively correlated with household education expenditures, suggesting minimal compensatory expenditure.

Figure 4: Disparity in distribution of achievement between Bangkok and elsewhere



Thailand faces many complex challenges that hinder improvements in learning achievement overtime. These range from weaknesses in teacher training and support programs, to poorly-educated parents for disadvantaged populations, to iodine deficiencies in children. In addition, there is a misalignment between the management of the key functions of the education system at the national level and accountability for results at the national level which makes any needed system-wide reforms and initiatives to improve learning difficult to implement.

System-wide initiatives are needed to address these problems but governance of the education system as a whole is fragmented. This reduces the capacity for reforms to take hold. The Ministry of Education is comprised of five agencies; higher education, basic education, vocational education, private education, and; teacher issues. Each of the five agencies operates independently within the Ministry of Education with its own chief executive officer and its own executive board. There is a multiplication of functions within each of the five agencies that govern the sector. Each agency has its own bureau for planning and budgeting, monitoring and evaluation, administration, and finance. Consequently, the functions of planning and budgeting, monitoring and evaluation, and administration and are not managed in a way that is meant to be accountable for results at the national level across the education system as a whole, but for results only within the purview of each respective agency.

## Towards a Growth Sustaining Education Sector

Producing the skills needed by the labor market requires alleviating the disparity in education quality and a governance structure that is conducive to long-term system-wide reforms and initiatives. The size of productivity gains needed for growth require that high levels of learning occur across the country, not just in Bangkok alone. Sector-wide reforms are needed to improve learning overtime and to ensure that the education sector is responsive to the demands of the labor market. As many countries in Asia have shown with sustained coordination efforts it is possible for Thailand to significantly improve education outcomes in support of broader growth.

There are already several new initiatives underway to improve the quality of education in Thailand that will help address these issues. These include the teacher retraining program, recent strategic plans to improve the quality of teaching and education participation. There are also several pilot programs such as the One District One Lab School, English Program Schools, and the Information and Communication Technology Schools. These could be complemented by other initiatives.

The cost of reducing the disparity in education quality depends on how much of the disparity is due to allocation of resources and how much is due to how well the resources are used. Because public funding for most schools is distributed uniformly (based on the number of students and the level of education), alleviating disparity in education quality requires both ensuring that the use of resources is equitable and efficient as well as offsetting differences in private resources and other non-monetary factors. Recent analyses in Thailand suggest that much of the disparity in learning achievement could be alleviated by improving how resources are used. For example, students' individual household characteristics explain a significant but small portion of the difference between the rich and poor. While compensatory spending programs are needed, larger reductions in disparity may be possible by improving education practices and policies in disadvantaged communities, but this requires an accountability mechanism that is responsive to local results and demand in order to induce these changes.

Increasing the involvement of parents and local communities in decisions that impact their school is one way to increase responsiveness to local results and demand. Parents through school board committees currently have an advisory role over non-salary expenditure at schools, but they have little influence over teacher selection and rewards. There have been numerous studies of school-based management reforms that have improved learning and other education indicators. Typically these devolve various types of decisions—ranging from budgeting, to hiring and firing teachers, to curriculum design—to school councils which consist of parents and other members of the community. For example, evaluations of school autonomy reforms in three Central American countries where school councils were given autonomy over hiring and firing of staff

found positive impacts on enrolment, retention and learning achievement. There are a range of models for empowering school councils; some similar to the community owned schools planned in the United Kingdom.

There are also several examples of targeted and compensatory programs that are effective at improving education outcomes. Chile's program improved test scores significantly by providing support to the lowest performing schools. Mexico's compensatory program targeted schools in poor communities and helped improve schooling outcomes. However, these types of reforms may be hindered under the currently fractured governance structure. Increasing alignment in decision making and accountability for results across the system would enable and support reforms and initiatives in education. Aside from organizational theory, a key component of aligning decision making and accountability is publicizing information on results. At the national level, Office of National Education Standards and Quality (ONESQA) and National Institute of Educational Testing Services (NIETS) provide performance measurement of schools in Thailand, but there is no functioning feedback loop from these agencies back to the decision making bodies in the Ministry of Education. In countries such as South Korea and Singapore, top performers in international assessments, there is a strong link between governance and the assessment agencies. There are also many examples of how information for results can be used for accountability sub-nationally down to the school level. There are numerous models of school inspection systems and school report cards which have proven to have a positive impact on learning achievement. However, the evidence that these alone are effective at improving results is mixed for middle and high income countries; policy makers would need to be attentive to their design.

Accountability reform can be further strengthened if aligned with teacher development. Teacher incentives and performance payments work well when accompanied by school accountability reforms. Incentives that promote teacher performance, professional development, remuneration, allocation and recruitment contribute to overall education sector performance.

## What can be done?

### Policy Options for a Growth Sustaining Education Sector

#### Priority Programs with High Payoffs

- **Invest in early child development for maximum returns** including by enforcing measures such as universal salt iodization for the elimination of iodine deficiency.
- **Improve the teacher supply and quality** by reforming selection, professional development, and associate remuneration with performance.
- **Create programs that target low performing students and schools** in order to improve learning achievement for disadvantaged communities

#### Enhanced Accountability and Performance through Institutional Reforms

- **Integrate functions across agencies within the education sector** as regards to budgeting, monitoring and evaluation, administration and finance.
- **Increase social accountability in the education system** through the annual publication of performance reports for school results along with the financial resources provided to the school. This would enable the effective involvement of parents in decisions that affect their schools.
- **Establish feedback loops so that performance information** from Office of National Education Standards and Quality (ONESQA) and National Institute of Educational Testing Services (NIETS) **feeds into the decision making process** at the Ministry of Education.

*This Policy Note draws is part of the on-going Thailand-World Bank Country Development Partnership on Education and skills development and draws on the key findings of the following reports:*

*Making Schools Work. (Bruns, B., D. Filmer, H. A. Patrinos—The World Bank 2011)*

*Analysis of Efficiency of Educational Expenditures. Discussion Paper 5, Thailand Public Finance Management Report. (The World Bank 2011)*

*Skills for Ideas-Led Growth with Equity. (The World Bank 2011)*

*Learning Outcomes in Thailand: What Can We Learn from International Assessments? (The World Bank 2011)*

For more information please contact Kevin Macdonald [kmacdonald1@worldbank.org](mailto:kmacdonald1@worldbank.org)