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Equity, Learning and Development: Why Making Rights Realities Makes Sense

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Summary

This paper explores recent patterns of growth in participation in education across the SEAMEO region with some relevant examples from other parts of the world. This illustrates how demand for education is changing and how varied the challenges of growth in access and attainment in education will be over the next fifteen years. The first section provides a status report. This is followed by a descriptive analysis of demographic transitions that will shape the relationships between education and labour markets and which should make it easier to finance investments in educational quality. The next section then explores several different kinds of inequalities in education with a focus on the SEAMEO region. Key sources of inequality relate to, household income, location, gender, and unequal access to different types of school. The basic arithmetic of transitions into the labour market will be central to growth and economic development. It will also be critical to managing transitions from school to work and reducing social conflict related to perceived and real inequalities. This profile of concerns for inequalities will shape the architecture of education and development over the next two decades and challenge national governments, and regional and multilateral organisations to address long standing inequalities before they have consequences for growth and stability.

Status Report

Southeast Asia is diverse. The region includes a very large country (Indonesia), and some of the smallest (Brunei Darussalam) and a wide range of per capita incomes from USD 1000 (Laos) to USD 40,000 (Singapore). Access to education in most parts of South East Asia has increased rapidly since the Jomtien (1990) and Dakar (20000 World Conferences on education. Across the region the majority of countries now enrol almost all children in grade 1, and most children complete the primary cycle in most countries, though many underachieve.

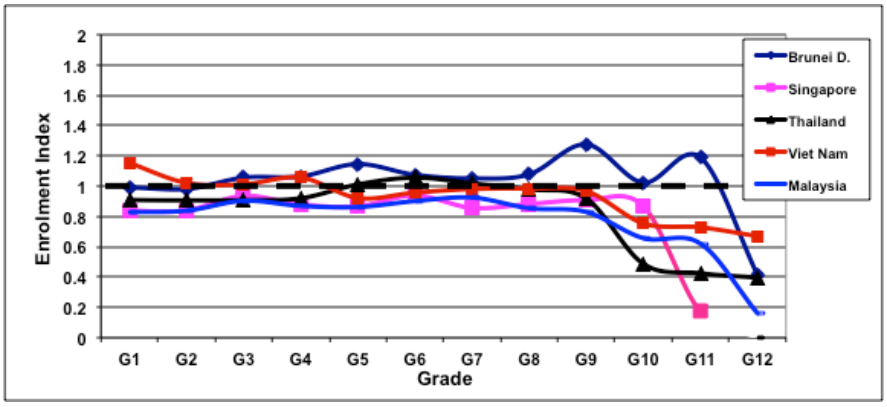
Gross enrolment rates (GERs) at primary level across South East Asia now average over 100%. In those countries that still have overage children and significant repetition, GERs are more than 110%. The general story is one of successful efforts to increase access. Myanmar, Cambodia and the Lao PDR have all seen large increases in enrolment rates as a result of Education for All programmes. Indonesia has also increased its participation rates in primary grades. In some countries GER has declined as a result of falling numbers of repeaters and over-age children and this indicates that internal efficiency has been increasing. Participation at lower secondary level is now near universal in about half the countries in the region but lags behind in others with GERs below 80% in five countries. Over enrolment in primary with GERs above 110% is associated with lower enrolments in lower secondary, illustrating that there are internal efficiency issues that need addressing and that selection is occurring into secondary grades with probable implications for equity. Annex 1 shows the patterns of enrolment rates.

More detailed analysis indicates that countries in the Asian region can be grouped according to patterns of participation. This provides more insight into how systems are evolving and how inclusion and exclusion are changing over time. The patterns in the charts show enrolments by grade in the school

system. Above grade 10 in some countries the education system becomes diversified with a range of further education options which may not be counted in school census statistics.

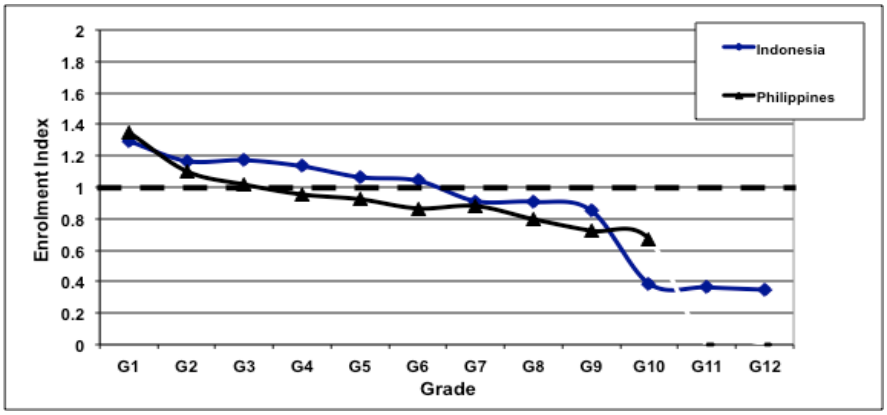
In the first group of countries enrolments are high until grade 9 indicating that virtually all children are enrolled and that dropout is small (Figure 1). The high enrolment countries in the region include Brunei Darussalam, Singapore, Thailand, Vietnam, and Malaysia. In this first set of high enrolment countries the number of children in each age group shown by the dotted line on the chart is equivalent to the numbers enrolled up to grade 10. In these countries almost all children attend school up to the age of 15 years and the inequalities are to be found in differences between schools in levels of academic achievement, staffing ratios, infrastructure, and costs. In some countries there are a range of school types including public schools financed by central government or community contributions, grant in aid schools that are publicly financed but privately managed, and private schools run for profit as businesses. Different children may attend different types of school. Where some schools charge fees and others do not participation will be stratified by price.

Figure 1 Group 1: High Participation, Low Drop Out



The second group of countries has enrolments in Grade 1 that are between 120% and 140% of the number of 6 year olds. The enrolment levels fall off by Grade 9 to about 80% of the age cohort as shown by the enrolment index (Figure 2). These countries are Indonesia and the Philippines. Above grade 6 it begins to be true that there are more children in the age group than there are who are enrolled, suggesting that there are some out of school children. In this group there is a tipping point where there are more in the age group for the grade than there are enrolled at about grade 6. Enrolment curves tend to be convex. Both countries are large and diverse so the aggregate patterns conceal more extreme patterns in particular regions and districts.

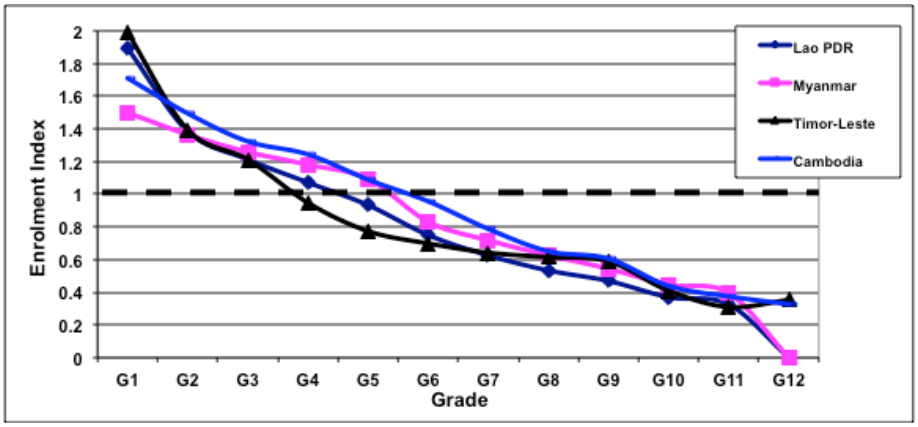
Figure 2 Group 2: Middle Level Enrolments and Drop Out



Group 3 countries are different (Figure 3). Enrolments in grade 1 are typically between 50% and 100% more than the number of children in the age group for grade 1 i.e. 6 year olds. This is an indication that there are many over age children enrolled. Dropout is then substantial and continues through the grades.

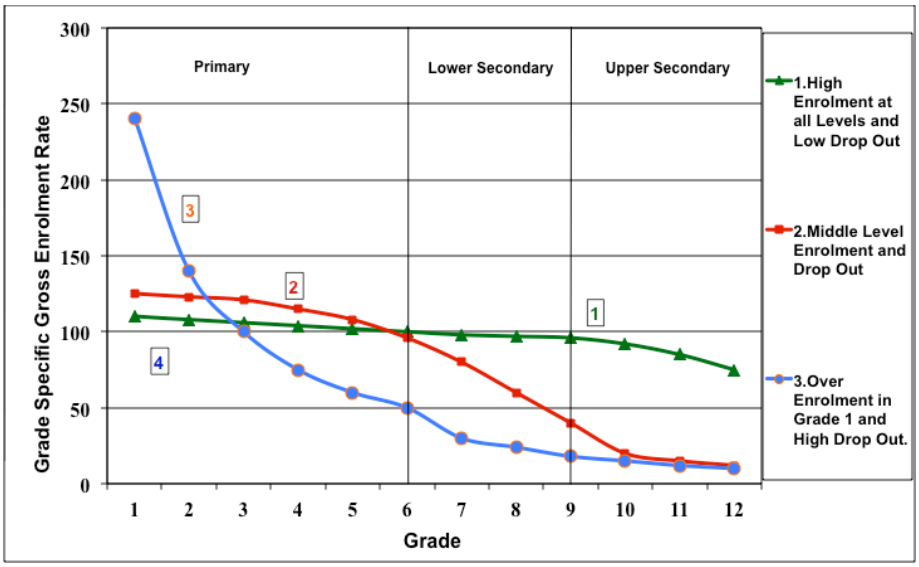
In most of these countries there is a continuous decline grade on grade above the lowest grades. By grade 9 enrolments are only about 50% of the number of children in the equivalent age group. The tipping point for more children in the age group than enrolled is typically about grade 4. Enrolment curves are mildly convex. In these countries fewer than half the children complete lower secondary school successfully. Drop out through primary school is likely to be strongly associated with household income, location and social group. It may be associated with gender.

Figure 3 Group 3: Countries with High Initial Enrolment and High Drop Out



This analysis leads to a generic chart of patterns of enrolment in Southeast Asia (Figure 4). Pattern 1 has almost all children enrolled through to grade 9 and most continuing to grade 12. Pattern 2 has over enrolment in the lower grades but by less than 20%, followed by a slow drop off in higher grades to about 80% of the age group by grade 9. Pattern 3 has considerable over-enrolment in grade 1 by as much as twice the age group, followed by a steep decline to enrolments to around 50% of the age group by grade 9.

Figure 4 Patterns of Enrolment by Grade in South and South East Asia



These patterns suggest different priorities that reflect the fundamental differences between the countries in each Group and suggest that planners should adapt their analyses and advocacy accordingly. Equity issues will have a different profile and patterns of of causes and effects depending on whether enrolment is approaching universal levels, or only includes a small proportion of the age group. As inequalities in physical access to schools diminish, other types of exclusion and disadvantage may become more prominent. Low enrolment systems select out children with disadvantage, high enrolment

systems may succeed in keeping all children enrolled but may maintain sharp differences between schools in terms of quality and costs. As access issues are addressed at one level they are likely to become prominent at the next higher level. Thus the most developed countries in the region may have more educational inequality at higher education than in primary schools.

In Group 1 countries the priorities to enhance equity are likely to focus on improved educational quality and managing the expansion of upper secondary schooling since most children are enrolled to grade 9 and beyond. Mass participation in higher education generates new challenges including how to finance students from low income households and how to ensure that they are not disadvantaged in the application and selection process for progression to higher levels.

In Group 2 countries overall enrolment rates at primary are in the mid range, most children complete the primary grades, and about half proceed to lower secondary schools. These countries have concerns for balanced and equitable growth of secondary schooling and improved quality at primary.

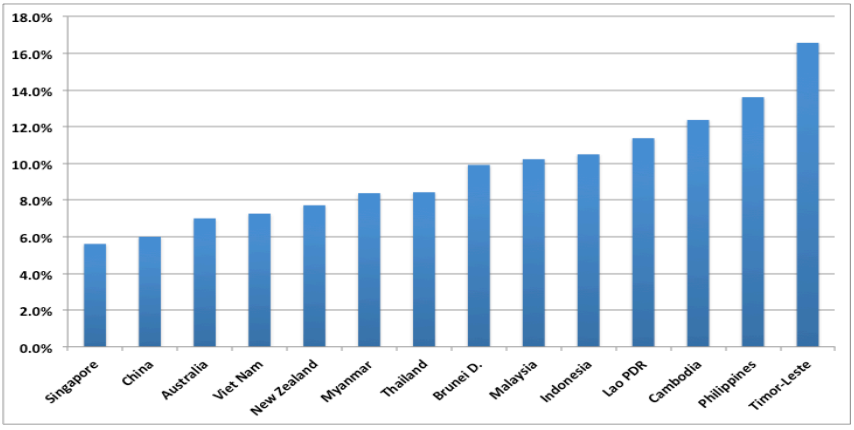
In Group 3 countries enrolment patterns suggest very high levels of repetition and over age enrolment in the lower grades and high drop out with low completion rates at primary. In these countries internal efficiency at primary is low and this must be addressed with some urgency. Expanding the capacity and the reach of the primary school system to include all school age children is likely to remain a priority since many children fail to complete a full cycle of basic education. Finding ways of increasing participation at secondary school at affordable costs will also be a priority.

This limited analysis has not attempted to include strategies that relate to post secondary and higher education. There are often complex issues at this level of provision with many pathways and forms of finance. However, it is consistently the case that if there is uneven and inequitable participation at secondary level, it is likely that it will be more uneven in higher grades. All higher education systems in SEAMEO are financed regressively in the sense that students are disproportionately from richer quintiles of household income but many higher education institutions receive public subsidy. If private benefits exceed public benefits by a wide margin this is inequitable. Fairer and more means blind methods of selection need to be explored to make a reality of promises of equal educational opportunity.

Demographic Transition

Countries in the Southeast Asia region have widely differing population growth rates and levels of fertility. In Timor-Leste about 16% of the population falls into the primary age group. Singapore and Vietnam have a profile more like China, Australia and New Zealand with only about 6% of the population falling in the primary school age group. The differences can be seen in figure 5.

Figure 5 School-age population as a percentage of total population

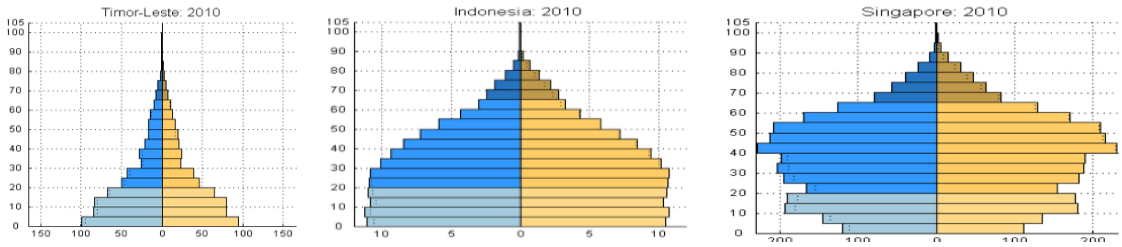


In some countries growth can be more than 3% a year leading to the numbers of children doubling in not much more than 20 years. In contrast in some of the countries the number of school age children is declining make it easier to provide schools and teachers for all children. Insight into demographic transition and its implications for planning education systems can be obtained by inspecting population pyramids. These illustrate clearly differences between countries in the ratio of children to adults. Where there are more children than working age adults who may pay tax it will be difficult to finance universal access to education, especially at higher levels since these tend to be more expensive. In countries that have passed through demographic transition there are more working age adults then there are children thus making it easier to find those teachers salaries and investment in school infrastructure.

The first group of countries shown below are those within SEAMEO which are yet to undergo demographic transition. Timor-Leste and Cambodia have rapidly growing populations of children. So does Laos. The Philippines is on the brink of demographic transition and it seems that after a long period of growth in population, fertility is declining and the number of children in each age group is stabilising.

In contrast most countries in the region have experienced demographic transition. This occurred sometime ago in Thailand and more recently in Indonesia and Malaysia. The number of children in Myanmar has declined over the last two decades. In Brunei Darussalam the child population has been stable for some time. In Vietnam it is clear that demographic transition has taken place to low growth with a shrinking population of children. In Singapore the decline in numbers of children is very striking and it has many more workers than children.

Figure 6 Demographic Transition – Three Illustrative Cases



These shifts in the composition of the population have implications for educational development in many different ways. As noted high proportions of children per adult may make it difficult to finance universal access in a sustainable way. These problems will be worse if a large proportion of the labour force are in occupations and livelihoods that don't generate a surplus and on which it is not possible to levy taxes. In addition the problem will be compounded if governments choose to collect less than 15% of GDP to generate the domestic revenue necessary to finance public services. Most countries that provide universal access have fiscal policy that delivers 25% of GDP as domestic revenue. Simply put fiscal equity requires that the relatively rich contribute more to public services than the relatively poor and vice versa. The principle is obvious, but the income thresholds for its application are essentially political. Equitable financing that directs more public resources to the poorest is essential to reducing differences in educational attainment and achievement.

A second set of issues relate to competition for access to schools and to desirable jobs in the labour market. If the number of children in the population is growing faster than the rate of economic growth and job creation, especially in the modern sector, than competition for places in schools and higher levels and for job opportunities will increase. The probability is that stratification related to household income, social group, location, and gender may harden with restricted movement between social classes and social groups across generations. Equity may be a victim of the pursuit of private returns to investment in education at the expense of national needs. Where competition is intense more is likely to be invested in the advantages associated with private tuition and fee paying private schools.

Thirdly, investment in education may be more or less equitable depending on the political preferences of governments. Political will is at the heart of policy on educational equity. Greater emphasis on the quality of schooling should lead to high levels of achievement and better rates of return on both public and private investment in education. It should also reduce difference in performance between the best and the worst schools. This will only be true if investment is pro-poor.

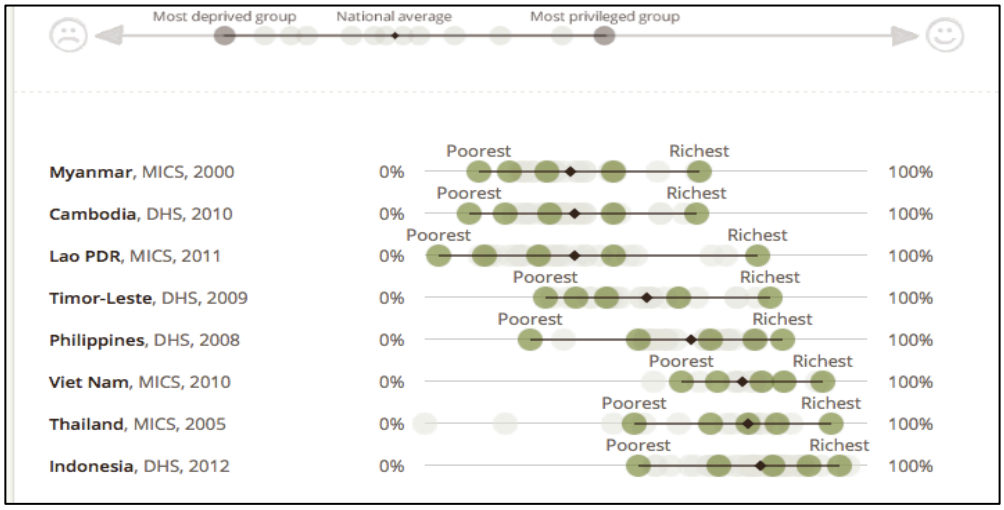
Inequalities of Access

Inequality in educational inputs and outcomes is inevitable and appropriate if the inequalities are designed to reduce differences in access, educational experience and achievement. That is what is widely meant by educational equity. The dilemma of development is that often it is unequally distributed across beneficiaries. Often the middle poor benefit more then the poorest. Equitable development strategies recognize this possibility and monitor the impact of interventions with a view to mediating any deterioration in equity for particular groups identified by low income, social affiliation, gender, location, disability of other forms of marginalization.

Educational attainment varies widely across the SEAMEO region. The most familiar variations are related to household income, location, gender, and social group. Other important sources of inequality relate to disability, health, civic status, and age. Inequalities can also exist in terms of educational opportunity, access, process, and outcomes. The concept of equity in education therefore has many different dimensions. It is concerned not only with greater equality, but with fairness that justifies unequal patterns of investment designed to favour those with disadvantage. Equity is therefore more than equal opportunity and can include measures that result in positive discrimination designed to close gaps between groups in attainment and educational performance. Equity in education relates to opportunity, process and outcomes and the allocation of resources related to needs as well as rights to equal access.

Inequalities in education in the Asian region, and in the SEAMEO countries, can be illustrated in many different ways with data from the World Inequality Database for Education (WIDE). Figure 7 shows how participation and lower secondary schooling differs in relation to household income across a range of countries. In Lao PDR very few of the poorest children complete lower secondary school, compared to over 70% of the richest children. In Indonesia about half of the poorest complete and nearly all of the richest.

Figure 7 Completion of Lower Secondary by Household Income



Regional differences, and those associated with gender can also be striking. Figures 8 and 9 show this. More than half of the children in Dili complete lower secondary but not much more than 30% of those in Oecussi in Timor Leste. The Mekon and Red River Deltas have very different levels of secondary completion. Differences in completion of lower secondary linked to gender are much smaller than those associated with household income and location, and this is a consistent finding across countries in SEAMEO.

Figure 8 Regional Differences in Lower Secondary Completion Rates

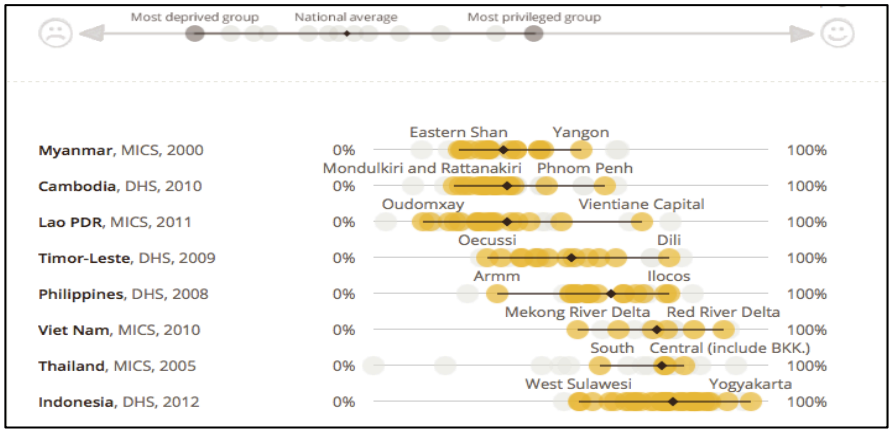
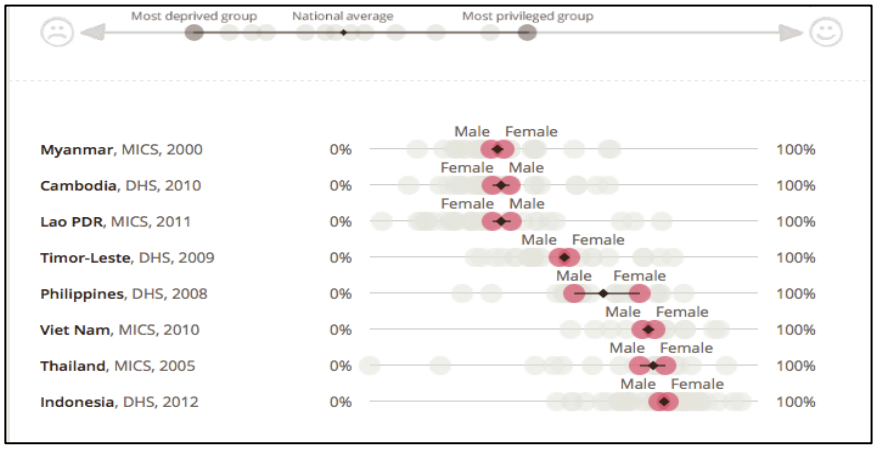
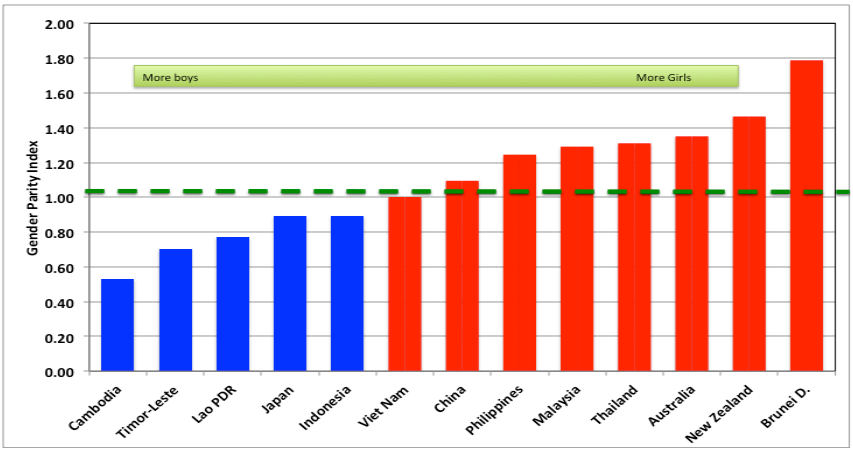


Figure 9 Gender differences in the completion of lower secondary



In contrast enrolments patterns at tertiary level increasingly tend to favour girls. There is a strong tendency for the richer countries in SEAMEO to have more girls than boys enrolled at university level (Figure 10). This is also true across the OECD countries, often by a wide margin. OECD countries now typically have many more girls than boys enrolled at tertiary level in almost all fields of study except engineering. This represents a striking transition for the situation before 2000. As economies in South East Asia become more and more service sector driven girls and young women with higher education are likely to take a larger and larger share of employment.

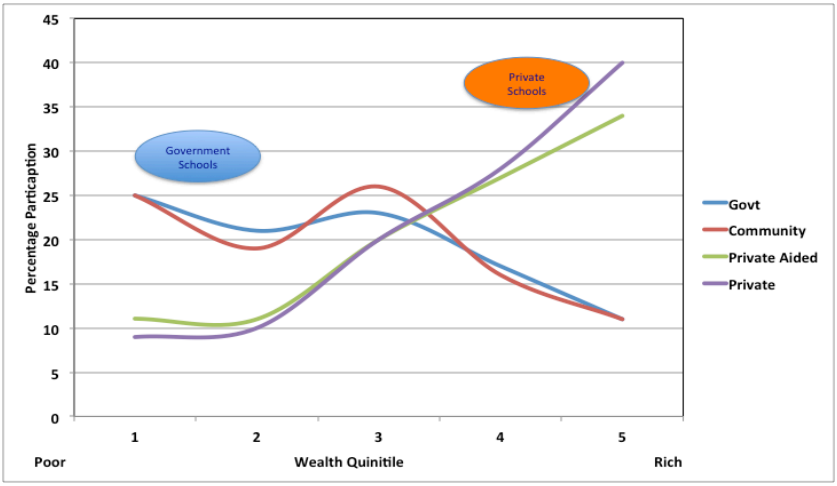
Figure 10 Gender Parity Index in Higher Education



Inequalities and Private Schools

There are many other forms of educational inequality that are significant. One dimension that is emerging as an important source of inequality in access and outcomes is the expansion of fee paying private schools. These ration access by price. In general schools that finance themselves from fees are usually unaffordable for most households outside the top two quintiles of household income unless scholarships or bursaries are made available from other sources. National data from India indicate how enrolments of those in the poorest households income groups are concentrated in government schools (Figurer 11). The reverse is true for high-income households. Similar patterns of exclusion are likely in SEAMEO countries with the wealthy opting out of public school systems and becoming concentrated in high cost private schools that exclude children from low income by price.

Figure 11 Access to Private Schools in India



Parts of South Asia have developed low price private schools in part because of the failure of public systems to deliver quality education at the same time as they have expanded rapidly. This has not happened in most countries in the SEAMEO region for several reasons. First, free or low price public schooling is widely available and of generally reasonable quality. Second, unlike in Pakistan and India where growth has been rapid in low-price private schools, it is not possible in Southeast Asia to pay qualified teachers between 10% and 20% of a government teacher's salary. Low price private schools depend on very low teacher salaries and such

schools cannot be run if salary costs are equivalent to those in public schools in SEAMEO countries. Third, most entrepreneurial investment in education the private sector in Southeast Asian countries has focused on middle and upper income households, rather than on generating profits from the poorest. SEAMEO countries still value the benefits of inclusive public systems of education to reach those who could not otherwise afford to participate if full cost recovery was used. In effect this means at least half the population depend on low fee or no fee public schools.

Private tuition has grown rapidly in the SEAMEO region and is endemic across all the countries. Some estimates suggest that households spend more on private tuition they do on attending regular school. Children may spend comparable amounts of time attending extra classes before and after formal school as they do in normal lessons. Fee paying education is common for preschool grades, and in the post secondary marketplace. Some aspects of dependence on private tuition are clearly not equitable since access is unavailable to those who cannot pay. It may also be that more effective private tuition commands a price premium that further excludes the middle poor.

Private schooling appears to have little effect on achievement when other factor are taken into account. Across 26 OECD countries PISA finds that private school students outperform public school students. This private school "advantage" is the equivalent of three-quarters of a year's worth of formal schooling in the OECD area. But more than three-quarters of the difference can be attributed to private schools' ability to attract socioeconomically advantaged students. When public schools are given similar levels of autonomy as private schools, and attract a similar student population as private schools, the private school advantage disappears in 13 out of 16 OECD countries. This PISA finds no relationship between the percentage of private schools in a school system and system-level performance. Charging for preschool rations access by price and has consequences for future educational attainment, unless subsidies are made available that allow participation by children of poor households.

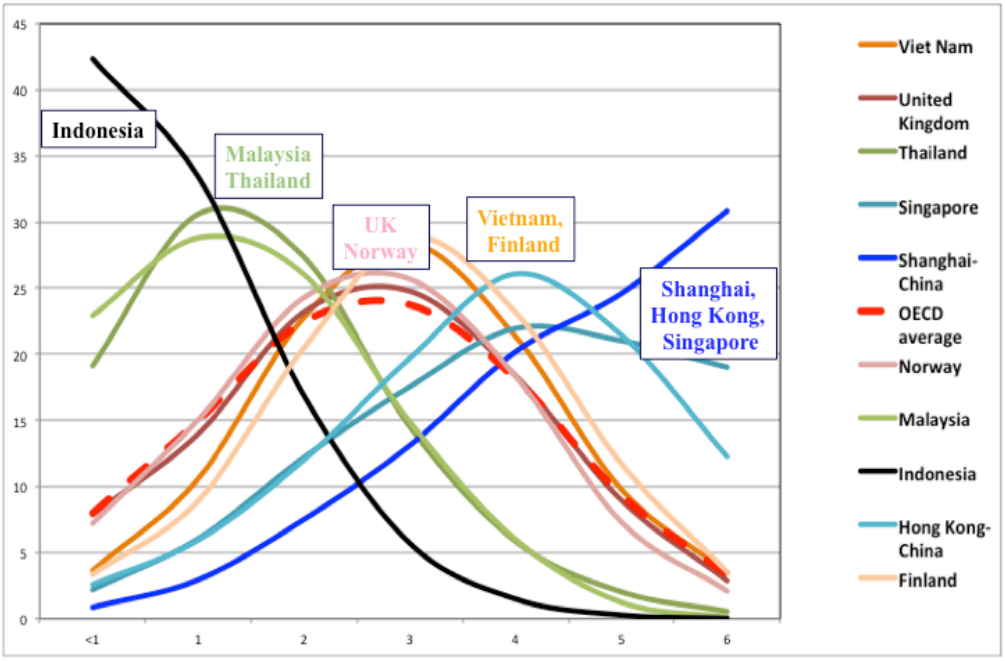
Inequalities in Achievement

Different kinds of inequality are apparent in patterns of achievement. Data from PISA across 72 countries for achievement in mathematics produces the following profiles (Figure 12). Type I is that found in high achieving countries which include Singapore (and Shanghai and Hong Kong, China). Type 2 is common in the OECD countries and includes the high scoring countries like Finland. It also includes Vietnam, and is characterised by negative skews with the median score grater than the mean. Type 3 countries like the U.K. and Norway shadow the OECD mean with a slight tendency to perform above the mean. This group includes other upper middle income countries located in Europe and North America and the more developed parts of Asia.

Countries in type 4 and 5 have progressively positively skewed performance with more and more candidates falling well below the international means scores. These countries include some in southern Europe and Central Asia and many others. In these the median value below the mean and most children fail to reach the international mean score. Malaysia and Thailand fall into this group. Indonesia is an outlier with larger numbers falling short of international norms and a heavy skew to the left. Performance is unequal between and within countries and this is often linked to other kinds of inequality. Patterns of performance of candidates in SEAMEO countries fall into different distributions. Each pattern contains many messages for

where the focus of educational investment should be that requires system level analysis. Negative skews suggest tests are too easy for many candidates and may lead to continued emphasis on high scoring students at the expense of the less capable. Conversely where there are positive skews little learning is taking place and there are likely to be systemic issues that need addressing.

Figure 12 Mathematics scores in the OECD PISA Assessments



Inequalities in Access to the Labour Market

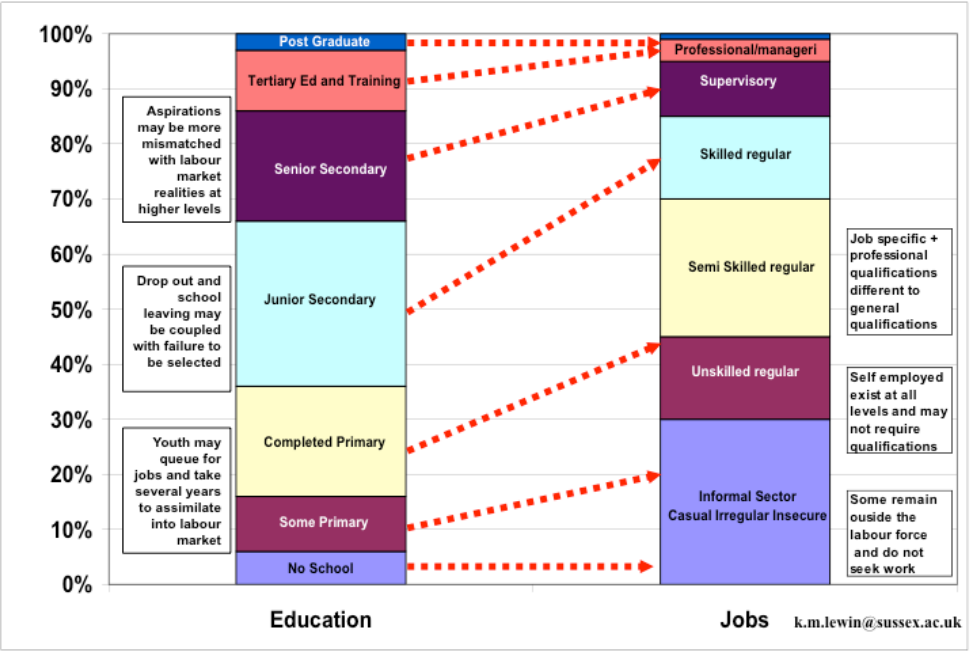
A final set of issues concern the basic arithmetic of youth unemployment. Inequalities in educational access and outcome are often replicated in labour market practices in recruitment and job allocation. In all modern societies educational qualifications are used to select candidates for jobs. Problems arise when the structure of educational output does not match the structure of labour market opportunities. This can lead to excessive emphasis on learning to get a job rather than learning to do a job, and to qualification escalation where higher and higher levels of educational requirements are needed to be qualified for the same jobs.

Figure 13 provides a simple illustration of the challenges balancing the supply and demand for school leavers and graduates at different levels. When the model is populated with real data critical imbalances can be identified. Selection is inevitable when supply exceeds demand. Educational qualifications are used in all modern labour markets to screen and select applicants for jobs. It is therefore important that these qualifications reflect real competencies, and that the process of acquiring qualifications is fair and provides more rather than less equal opportunities.

Societies that fail to manage the transition from school to work equitably may be both unfair and inefficient. They may also experience social unrest if the imbalances become too large and

the inequalities begin to question the political economy of the allocation of opportunities in the labour market. Events in the Arab world that have resulted in popular unrest and mass demonstrations have in part been fuelled by the unmet aspirations of educated young people flooding into stagnant labour markets. Pressures to succeed in highly competitive market places for jobs and university places appear to have led to rising rates of adolescent suicide and disillusion with the links between effort and reward.

Figure 13 The basic arithmetic of youth unemployment



Concluding Comments

This paper has reviewed the status of countries in the SEAMEO region in terms of access to education and the need for more equity to make rights to education a reality. It notes that:

Status

- High performing countries have full enrolment through to grade 10 or more years, little drop out and few over age children
- Low enrolment countries have less than 50% in secondary school, high drop out, and many over age children
- The gaps between high performing countries and the rest have persisted and some gaps may have widened
- Many enrolled may be "silently excluded" and learn little
- There are three patterns of enrolment that determine different pathways to making educational rights realities in the region.
- These patterns suggest different priorities that reflect the fundamental differences between the countries education systems and identify pathways towards growth with greater equity.

Demographic transition

- Demographic transition to low growth has taken place in an increasing number of countries in the region
- Low population growth means lower dependence ratios and more workers and taxes per child
- This makes it easier to finance universal access to education
- High population growth means that the number of schools and teachers may have to double every 15 years in the minority of countries where fertility remains very high
- The number entering the labour market may be greater than the new jobs provided by economic growth

Inequalities

- Inequalities in achievement and attainment are related to household income, location, gender, ethnicity, language, disability and age
- Inequalities can be very wide both between and within countries
- Inequalities are often greater within rather than between countries
- Inequality of opportunity leads to under-investment in human resources
- Privatisation and fee paying ration access by price and are not a solution to low performance
- Achievement levels between countries vary widely
- Achievement levels within countries are even greater
- Low achieving countries have skewed patterns of performance with many low performing candidates
- All countries have high performing schools; the problem is to increase their numbers

Basic Arithmetic of Youth Unemployment

- All modern societies use educational qualifications to select applicants for jobs
- Inequalities in educational access and outcome are often replicated in labour market practices in recruitment
- Problems arise when the structure of educational output does not match structure of labour market opportunities.
- This results in excessive emphasis on learning to get a job, qualification escalation, and to excessive pressure to perform in exams
- Societies that fail to manage the transition from school to work equitably may be both unfair an inefficient and may also experience social unrest

A Policy Brief of Options for More Equitable Investment

No single set of policy prescriptions is relevant across the SEAMEO countries. The strength of the region lies in its diversity of purpose and ambition, the wealth of experience of successful educational development embedded in the unprecedented development of effective mass education systems over the last three decades. The region is uniquely placed to share experience of what does and does not work to make educational rights realties. There is much that the rest of the world can learn from the region and much that can be shared within the

region that can underpin prosperity and the acquisition of the knowledge and skills and attitudes that make the difference between modern states and those that fail to deliver universal public goods like education effectively. A SEAMEO perspective on equitable growth may or may not be similar to that adopted in other parts of the word with different histories and challenges. A short menu of policy options and goals for 2030 and beyond can be distilled from recent developments and the analysis in this paper and can be adapted to purpose to suit different national circumstances.

Access and Participation

- Commitment to universal access to 12 years of education by 18 years old
- Large scale mobilisation to provide universal ECD
- Resources allocated to provide preschool free to those below the poverty line
- Much expanded higher education delivered in many different ways at costs that are affordable to all income groups
- Differentiated educational goals and targets across regions and within countries that reflect baseline status and development aspirations
- Consolidation of teacher education and deployment to ensure that every child has a qualified teacher in all core subjects

Equity

- Goals linked to more equity in attainment and achievement by household income, social group, gender, location, disability
- Pro-poor allocation of educational investment to reduce gaps in access and quality within countries and promote more equal opportunities
- Commitments to ensure no households below the poverty line are charged for basic educational services
- Balanced programmes to promote gender equity that recognise the special circumstances of both boys and girls
- Regulation of the growth of fee paying private schools providing educational services targeted on the poor
- Special measures to support growth with equity in fragile and disrupted states

Achievement

- Pedagogic strategies and formative assessment designed to reduce skews in performance that disadvantage low achieving learners, exclude them from higher level cognitive understanding, and sustain wide gaps in capabilities
- Investments in knowledge and skill related to science and technology and international competitiveness

Qualifications and Jobs

- Monitor and manage the basic arithmetic of youth unemployment
- Assure quality and fairness of qualifications and adopt safeguards to discourage excessive emphasis on qualifications and examination orientated learning

Finance

- Action to ensure that education systems are financed from domestic revenue from progressive taxation with accelerated development supported by aid when appropriate
- Long term commitment to funding basic education as a public good publicly financed and designed to promote social and economic equity.

Equity in education lies at the heart of sustained development. States raise taxes to provide public goods. Education is a public good. Social justice and cohesion depends on the social

contract between governments and their peoples to provide quality services and opportunities equitably. The ability to do this depends on economic growth that in turn benefits directly from increased knowledge and skill. Equity is both efficient and effective. It means that the potential of all members of a society can be mobilised through access to education, and it encourages more demand led education that responds to needs for knowledge and skill. Educational equity has the added attraction of diminishing social differences that, sooner or later, may result in threats to social cohesion. All this has been said before. It is no less true now than it was in 1846.

> "Education does better than to disarm the poor of their hostility towards the rich; it prevents being poor. Agrarianism is the revenge of poverty against wealth. The wanton destruction of the property of others - the burning of haystacks, the demolition of machinery because it supersedes hand-labor, the sprinkling of vitriol on rich dresses - is only agrarianism run mad. Education prevents both the revenge and the madness".

Horace Mann 1846 Annual Report; Massachusetts State Board of Education

Annex 1 GERs in SEAMEO

Figure 1 GERs 1999-2011 at Primary in SEA

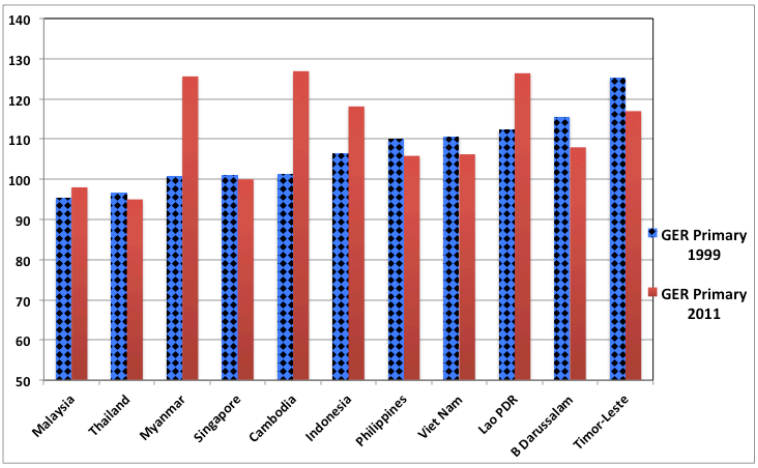
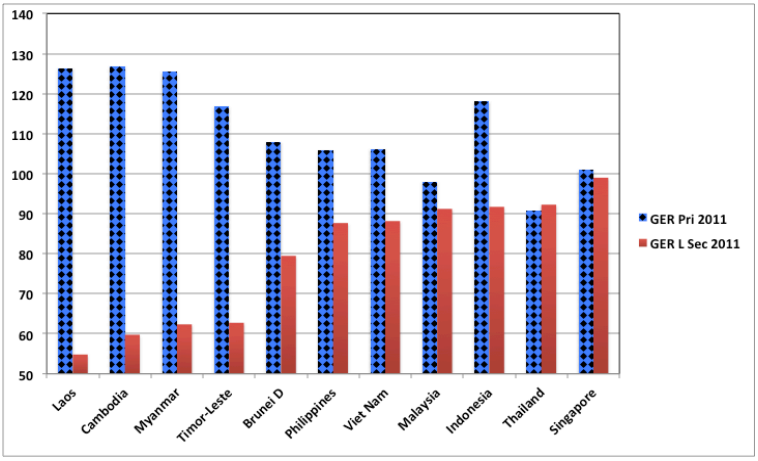


Figure 2 GER Primary and Lower Secondary 2011 SSEA



Annex 2 Demographic Transition in SEAMEO