“Towards Quality Learning for All in Asia and the Pacific”
Regional Policy Seminar
Seoul, Republic of Korea
28-30 July 2011

Background Paper

1. Introduction

**Joint KEDI – UNESCO Bangkok seminar series**
UNESCO Asia and Pacific Regional Bureau for Education (Education Policy and Reform Unit - EPR, UNESCO Bangkok) and the Korean Educational Development Institute (KEDI) have jointly hosted a series of annual thematic seminars since 2002. Although seminar topics initially focused on EFA-related themes, they evolved more recently to include a diverse array of emerging education policy issues such as: Financing National EFA Plan Implementation in Asian Countries (2006), The Gender Challenges in Post Primary Education in East and Southeast Asia (2007), Decentralization of Implementing Education Policies and Reforms (2008), and Monitoring Student Learning Outcomes and School Performance (2010).

The 2011 Seminar, entitled “Towards Quality Learning for All in Asia and the Pacific”, is the 9th in the series of seminars co-organized by UNESCO and KEDI. Since quality learning is too broad a topic to cover fully in one seminar, the focus of the discussion is on two selected policy domains that constitute obvious determinants of quality learning in most countries: education personnel policies and financing mechanisms. The seminar will also address how to strengthen international cooperation in support of quality improvement, thereby aiming to provide useful inputs for the upcoming Fourth High Level Forum (HLF) on aid effectiveness which will take place in Busan, Republic of Korea, in November 2011.

**Objectives of the policy seminar**
The “Towards Quality Learning for All in Asia and the Pacific” regional policy seminar aims to:

- Facilitate the sharing of experiences, knowledge and best practices of national policies on teacher management and education financing in relation to student learning
- Identify effective strategies for improving the quality of education with a focus on policy responses in teacher and school management and education finance
- Strengthen regional cooperation in pursuit of EFA goal 6 on education quality
- Identify possible areas for improving international cooperation and aid effectiveness in support of quality education in Asia and the Pacific.
**Expected outcomes**

- Enhanced knowledge based on major research findings relevant to effective strategies for improving quality of learning, especially those related to education personnel and financing mechanisms
- Recommendations on actions needed to further improve education quality addressed to national policy makers, mass media and international partners, including UNESCO
- Strengthening of regional and international networks, partnerships and cooperation in quality improvement in education
- Relevant inputs for the upcoming Fourth High Level Forum on aid effectiveness in Busan, Republic of Korea, in November 2011
- A regional synthesis of the national policies of participating countries in education personnel management, education financing and international cooperation for quality learning, and a final report reflecting the above outcomes and recommended actions.

2. Quality of learning in context

The ultimate purpose of any education system is student learning. In support of this purpose, policymakers, researchers, and practitioners across the globe have made considerable attempts to understand: a) what determines and influences the quality of learning, and b) what policies and how resource allocations should be made in order to enhance learning outcomes. Considering the diverse conceptualizations of quality learning, the following international frameworks provide context to the discussion of quality learning in general and for the Asia-Pacific region in particular.

*Delors report towards a lifelong learning perspective*

The report of the independent International Commission on Education for the Twenty-first Century, “Learning: The Treasure Within” (Delors et al., 1996), gave an important and influential lead in defining and improving quality learning. It provides a helpful conceptual framework for analyzing and guiding the content, organization and management of education services for achieving quality. The report examines the benefits and opportunities that education can offer individuals in a rapidly changing, globalized world. The realities of contemporary life clearly call for new approaches to learning.

The report addresses this issue by looking at the ultimate aims of learning and the implications for content, method and organization of schooling and beyond. It proposes that education provision be based on four pillars: learning to know, learning to do, learning to live together and learning to be. Giving equal weight to each of these pillars would result in a substantial reorganization of the education construct and priorities in what and how learning should be delivered throughout education systems. The quality of learning is therefore judged on the acquired knowledge, skills, understanding and values that enable children and young people to find effective ways of coping with tension, pressure, contradictions that exist in their societies and to lead successful lives. Learning throughout life has been advocated, giving rise to the proliferation of lifelong and life-wide learning concepts and visions across the world.

*Quality learning as an EFA goal*

Quality learning is one of the EFA goals which commits Member States and the international community to “Improving all aspects of the quality of education and ensuring excellence of all so that recognized
and measurable learning outcomes are achieved by all, especially in literacy, numeracy, and essential life skills” (Dakar Framework of Action, 2000).

In the Asia-Pacific region, this goal has been emphasized, though not sufficiently enough, in many high-level forums and reports such as the end-of-decade EFA 2000 Assessment of the Asia-Pacific Region (UNESCO Bangkok, January 2000) and the regional report on progress towards Education for All in Asia and the Pacific (UNESCO Bangkok, 2011a). As such, quality of education has been identified as one of the three major EFA dimensions\(^1\) guiding future educational reforms and policy in the region. With an increasing number of children now completing basic education, attention has shifted towards the nature of the education they are receiving, and the identification of the best conditions for effective learning.

**International assessments of learning achievement**

There are many global and regional programmes aimed at measuring student learning achievement which allow for cross-country comparisons. In particular, OECD’s PISA (Programme for International Student Assessment) and International Association for the Evaluation of Education Achievement (IEA)’s TIMSS (Trends in International Math and Science Study), have become important tools for monitoring student learning outcomes. By participating in these international assessments, countries can assess the performance of their education systems vis-à-vis international benchmarks and draw lessons for improvement. In the Asia-Pacific Region, more and more countries are participating (Table 1).

**Table 1: Countries and territories participating in PISA and TIMSS**

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While most of the international and regional assessments of learning achievement are primarily concerned with cognitive skills (e.g., math and reading), there is an emerging demand for a set of skills that extends beyond this. At the same time, there has been a shift towards lifelong learning, from

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\(^1\) The three emerging directions for future education policy in Asia – Pacific include reaching the unreachable, pre and post primary education and quality of education. For further details, see Regional Report on Progress towards Education for All in Asia and the Pacific, UNESCO Asia – Pacific Regional Bureau for Education, Bangkok 2011
teacher-centred approaches to learning-centred approaches, from transmission of information to construction of knowledge, from memorization and rote learning to analysis, synthesis and application, from focus on knowledge to development of skills and competencies (UNESCO, 2011b). These new skills and competencies are increasingly valued as they help accommodate new technologies and meet the demands of an increasingly knowledge-based, globalized society. Efforts to identify such “key competencies” and their implications for education include OECD’s DeSeCo (Definition and Selection of Competencies) and ATC21S (Assessment and Teaching of 21st Century Skills) by Cisco, Intel and Microsoft.

Reflecting this trend, international assessments are also changing. International Association for the Evaluation of Educational Achievement (IEA) is conducting surveys on learning outcomes beyond academic achievement, such as civic literacy (International Civic and Citizenship Education Study, ICCS) and computer literacy (International Computer and Information Literacy Study, ICILS). OECD’s DeSeCo project is also providing an important conceptual background for future PISA to be more competence-based.

3. Overview of current concerns regarding quality learning in Asia-Pacific region

Asia-Pacific is a vast and diverse region covering over 40 countries, ranging from the most populous countries in the world to small Pacific islands, and from the most advanced economies to least developed countries. Over the past decade, the region has made tremendous progress in achieving Education for All (EFA) goals. Many governments have shown a strong political commitment toward achieving universal basic education and have further expanded their post-basic education, some achieving universal secondary education. However, there are still challenges in reaching the most disadvantaged groups and also ensuring the quality of education, especially learning outcomes. A number of key issues and concerns are emerging regarding improving education quality which many countries in the region are now seeking to address. These are:

*Increasing shift in focus from schooling to learning*: As participation in formal education increases, there has been growing concern over the quality, content and relevance of learning in the Asia-Pacific region. This shift is due to several reasons. In particular, many countries have achieved universal primary or basic education generating a shift in priority towards student learning. Secondly, evidence over the past decade has shown that efforts to expand enrolment must be accompanied by attempts to enhance educational quality if children are to be attracted to school, stay there and achieve meaningful learning outcomes. There is an increasing realization that access and quality are two sides of the same coin; if access is expanded without relevance and quality, high drop-out rates will continue, which in turn undermines the move to expand access and reduces the internal efficiency of the education system. Therefore, addressing quality issues can help both to expand and to improve the educational opportunities for all.

*Skill mismatch between the employment needs and what the education system produces*: In the context of rapid technological changes and globalization, subject-specific knowledge is not the only determinant of suitability for employment. Employers are increasingly looking for IT-literate people who can communicate and work well in teams, and who possess key skills in problem solving, working with diversity and leadership. Many employers are finding it increasingly difficult to find the skilled employees they need. A labour force equipped with these skills, especially in countries undertaking structural adjustments or economic liberalization, is lacking. This skill mismatch decreases the employability of graduates. At the same time, many working adults are not able to access jobs with
family-supporting wages because they lack the education and skills training needed to advance. Both
trends have a direct and negative impact on the economy.

Growing interest in assessing the learning outcomes: Quality of education is increasingly approached
from the lens of learning outcomes including literacy, numeracy, critical thinking skills, occupational
skills, and responsible citizenship. These can be grouped broadly into cognitive and non-cognitive or
social outcomes. While measuring cognitive skills is relatively straightforward using test scores as a
proxy, it is much more difficult to measure the non-cognitive skills. More and more countries are
organizing national tests and/or participating in international learning assessment surveys such as PISA
and TIMMS. At least 26 countries in the region have undertaken some form of large-scale learning
assessment. Asia and the Pacific is the only region of the world with no common regional standards for
examinations and learning assessments. While having no common standards in a region as diverse as
the Asia-Pacific is still an issue of debate, the fact that national learning assessments are conducted with
increasing frequency and that the number of countries participating in international learning assessment
surveys is increasing over years demonstrates the concern given to learning outcomes.

Wide disparities in learning achievement across and within countries: As said above, an increasing
number of Asia and Pacific countries and territories are taking part in international learning
achievement surveys, such as OECD’s PISA and IEA’s TIMSS. Review of the results of both TIMSS and
PISA reveal that while developed countries in Asia and the Pacific are leading the world, there are
notable gaps in student learning outcomes between developing and high-income economies in the
region (Figure 1). Within in a country, significant disparities can be found in terms of learning (Figure 2).
At the national level, public examinations tend to be conducted at major system transition points, such
as at the end of lower secondary. While this practice serves as an important quality control mechanism,
‘high-stake’ public examinations may have negative consequences, such as excessive rote learning which
is more about memorizing than adaptive learning, and the cost of commercial tutoring which may widen
educational disparities. Much can be learnt from the reforms of examinations systems underway in the
region to address these issues.

Figure 1: Secondary school achievement in PISA Mathematics and Reading tests, Asian countries

![Figure 1: Secondary school achievement in PISA Mathematics and Reading tests, Asian countries](image)

Source: OECD Programme for International Student Assessment 2009 Database
4. Major determinants of quality learning

Quality learning is a vast and elusive construct. However, a definition of quality learning is necessary for there needs to be shared understanding of quality learning before it can be measured, monitored and improved across diverse systems of education. Despite many efforts to define education quality since 2000, and to measure it both quantitatively and qualitatively for the purpose of planning and management, global consensus on the feasibility of developing common core indicators, assessment tools, and strategies focusing on improving the quality of learning remains a challenge. Existing attempts to conceptualize the notion of quality in education and their corresponding analytical approaches may be categorized into three main types of models: learner-centred model inspired by the rights of the child perspective, inputs-process-outputs model which sees education as a production industry and multidimensional interaction model which combines both the sociological and educational perspectives to take into account the dynamics of interaction between various stakeholders (UNESCO, 2011b).

There is abundant evidence of the factors which affect student learning and their learning outcomes ranging from student’s characteristics (e.g. student’s preparedness for primary school as evidenced by participation in early childhood programmes, the socio-economic background of the student’s family, the education level of the head of household) to curriculum, teachers, education system management, and so on. This section explores the evidence on these factors in an effort to establish which ones are most influential in improving quality and thus which policy and funding priority should be given. It provides a synthesis of research findings based on a review of related studies, reports and research articles.
Attempts to identify the best ways to improve learning outcomes have employed the production function analysis to assume that a set of inputs to schooling is processed and transformed by teachers and pupils into a set of products, or outputs and eventually, to outcomes (Figure 3).

**Figure 3: Production Function Analysis of Education Quality**

While no model or formula on what determines the quality of education has been validated by empirical research, there has been a growing body of research conducted in recent years aimed at identifying key determinants of quality of learning. One of the significant findings is that teacher quality matters a great deal in terms of student learning. Elements of teacher quality can be grouped into qualifications, characteristics, practices, and outcomes (effectiveness). Using test scores as a measure of learning achievement, these researches try to establish the link between teacher quality and student learning.

A number of international assessments have also been conducted to facilitate benchmarking and comparisons of learning achievements among countries and over time. Review of the research findings and results of these international tests reveals a number of findings. First, families’ socio-economic status is very influential in determining achievement in all contexts. Second, the class time spent on mathematics, science and language strongly affects performance. Third, the teacher’s gender has an impact in many lower income countries. Fourth, the effect of teachers with degrees in mathematics and appropriate certifications, and possibly higher level of mathematics courses, appears to be strongly and consistently related to student achievement in mathematics, and the findings are strongest at the secondary level suggesting that such qualifications may be crucial for secondary teachers. Fifth, teacher experience matters, but it contributes differentially only in the first four or five years of teaching. During this time, teachers appear to gain in effectiveness (contribution to student achievement scores) but then they level off, which means that years of experience beyond the fifth year contribute little or no additional benefit in terms of student achievement. Several studies also show that the impact of pupils’ socio-economic background can be partly offset by a better school environment, stronger support to teachers, greater school autonomy and additional resources, especially textbooks.
Other researches focusing on the learning process itself – the classroom activities and creative interaction between pupils and teachers in the classroom – shows that good primary schools are typically characterized by strong leadership, an orderly and secure classroom environment, emphasis on acquiring basic skills, high expectations regarding pupils’ attainment and frequent assessment of their progress. How well teachers master the curriculum, the level of their verbal skills and their expectations of students all contribute to school quality.

Finally, the social context of the school matters. Studies in the sociology of education suggest that students whose family background and peer group have ideals close to those promoted by their school will tend to achieve higher levels of cognitive skills than others, who may try to escape the contradiction by rebelling. The need for education to be built around an explicit social goal presents challenges for the quality of schooling that cannot be addressed by technical means alone. In addition, case studies from different country context, for example by income level, also suggest that successful reforms focusing on quality require a strong leading role by government and a robust long-term vision for education.

The following paragraphs present a synoptic overview of two selected determining factors of quality learning and their situation in the Asia and the Pacific region.

Teacher Management

While it is generally agreed that teachers play a key role in shaping the student learning, there remains considerable debate as to the policies that best support teachers. Topics of debate include the measures to attract and retain good teachers in the teaching profession, the type and length of training the teachers need and the professional development and support they should be able to draw on in order to fulfil their job. Each strand of the policy and practice spectrum is complicated, interdependent and determined by contextual factors. In many Asia-Pacific countries, low teacher salaries, teacher shortages in rural and remote areas and constrained education budget further complicate efforts to improve teacher management systems.

In East Asia and the Pacific, an estimated 2.1 million teachers need to be recruited between 2007 and 2015 in order to meet EFA goal 2 of universal primary education. South and West Asia, meanwhile, need to recruit 1.9 million teachers to create a good learning environment for all primary school aged children. More equitable teacher deployment is also vital: often the poorest regions and most disadvantaged schools have the fewest and least qualified teachers.

Significant levels of formal minimum qualifications are required to teach at primary and secondary schools in the region (Figure 4), and there is a general tendency to upgrade educational level of teachers for all sub-sectors. However, in some countries, teachers do not necessarily meet the minimum requirements for the assigned level or they may teach subjects for which they have not been trained. In Lao PDR, 87% of secondary teachers have received formal teacher training in 2008, by contrast only 46.5% of secondary teachers are qualified to teach at the secondary level. Other concerns relate to improving the quality of training programmes; low teacher salaries; and the availability of good qualified teachers in rural and remote areas.

Figure 4. Years of pre-service teacher training for different levels of education in Asian countries
*Note: China’s pre-service training requirement for primary is 3-4 years, while Lao PDR for upper secondary is 4-5 years. The minimum requirements for each country are used in the figure.


Classes which are too big do not allow the teacher to pay enough attention to individual students affecting the effectiveness of teaching and learning. The pupil/teacher ratio fell across the region, particularly in South and West Asia, from 1990-2000 and has been further reduced since then, especially in Central and East Asia. However, South and West Asia still has substantially higher pupil/teacher ratio compared to the world average and other sub-regions in the Asia-Pacific (Figure 5).

**Figure 5. Pupil teacher ratio in primary education, Asian sub-regions 1990-2008**

Source: UIS (2010)
Financing Education

Many countries have implemented policies to improve quality of learning. However, inadequate funding has kept these policies from having maximum impact. Financial resource constraints are often reported as a major impediment to progress. While the Delors report (Delors et al., 1996) suggested that government should invest at least 6% of GNP in education, countries in the Asia-Pacific region are still struggling with enormous variations in the capacities for financing and priority given to education. Some choose to have more additional buildings and teachers for those students not yet in the system (expanding quantity) while others choose to have more textbooks and facilities for those already in school (improving quality). These choices might not be wise because the consideration is based on the sometimes false dichotomy of quantity versus quality especially when budgets are limited. In fact, financing needs to address both quality improvement and expansion of access at the same time. This need stems from the recognition that access and quality are two sides of the same coin, as discussed above.

Another concern has been the way the money is spent. It has been widely acknowledged that increase in the level of funding does not automatically lead to improved learning outcomes. For resources to get converted into quality learning, they need to be spent wisely, by having an appropriate targeting mechanism enabling greater equity and inclusion, and a sound financial management and accountability system. A clear financing policy and prioritization for ensuring quality learning for all, not for some, is required.

5. Towards improved quality of learning – points for discussion

The above findings provide reflection on what makes quality learning. What is clear from these findings are the dynamics of the teaching and learning process, of the factors influencing quality learning and of the ways to improve learning outcomes. Therefore policies for better quality must be systemic and inclusive:

- addressing a number of urgent needs - for more and better trained teachers, for improved textbooks available to all learners, for pedagogical renewal and for more welcoming learning environments;
- focusing on the factors that are most influential in improving quality in the context of different situations and traditions – teachers, instruction time, pedagogy, learning materials, facilities, language, school autonomy, leadership, and;
- requiring an enabling policy environment - better justified and targeted spending, better governance system, stronger leading role by government and more effective international cooperation

During this seminar, discussion will focus on two specific “determinants” of quality of learning – education personnel and finance. Though not exhaustive, suggested topics based largely on the education policy analysis framework proposed by UNESCO Bangkok (2011c) are presented below for further discussion.

Education Personnel Management

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The issues in this area range from recruitment, training, deployment, compensation and retention of the education personnel, especially the teaching force. The key issues of education personnel can be divided into the following broad categories:

1. **Status and working conditions of education personnel, especially teachers**, including teachers’ workload, staff compensation and benefits, employment opportunities and career structure and participation in decision-making on issues relating to teachers.
2. **Recruitment and management of education personnel** including demand and supply of teachers, posting and transfer of education personnel (deployment and redeployment), admission criteria to teacher education programmes and selection to the teaching profession, special provisions for teachers and other staff in remote areas, supervision and assessment of performance of teachers and other staff.
3. **Teacher preparation and continuing professional development** including quality of the different types of teacher preparation programmes, the different approaches to professional development of teachers as well as issues relating to professional standards and code of ethics.
4. **Teachers and students learning** which explores the effect of teacher management policies on students learning. This includes (a) frequency of supervision, (b) teacher accountability and autonomy, and (b) school leadership.

**Financing policies**

Any consideration of a financing system for education services should look simultaneously at three dimensions: availability of resources, allocation and utilization. Quite often, “resources” and “funds” are used interchangeably, but the latter gives more weight to the financial resources. Ultimately, all types of resources required for achieving the education development goals can and should be converted into monetary terms in order to facilitate the sector budgeting process and integrate sector planning with the country’s broader socio-economic planning exercise. The key issues in this area include:

1. **Sufficiency** which concerns the level or amount of funding and whether it is sufficient for implementing the set education policies. Resources are often scarce and thus innovative ways to mobilise additional funds for financing education is also an issue.
2. **Equity in resource allocation** which concerns whether resource allocation is equitable, predictable and sustainable. A targeting mechanism can be used in order to ensure that resources are allocated adequately to those who need them most and appropriately between education levels and functions.
3. **Efficiency in resource utilization** which concerns the way resources are used, and whether utilization is cost effective. Put simply, with greater efficiency, one would expect to achieve more with the same level of resources or to achieve the same with fewer resources.
4. **Financing modalities for quality student learning** which concerns financing mechanisms directly aimed at improving student learning such as conditional cash transfers, student loans, scholarships, and school feeding. This also concerns targeting for the resources to be allocated to the groups of students that need them most or to the factors that are most influential in improving quality for example teacher quality.
References


