Overview and Introduction

JOHN P. KEEVES
Flinders University Institute of International Education, Australia

RYO WATANABE
National Institute for Educational Policy Research of Japan, Japan

1. FURTHERING COOPERATION AMONG EDUCATIONAL RESEARCH WORKERS

In early October, 2000 representatives of educational research organisations in the Asia-Pacific region met at the offices of the National Institute for Educational Policy Research of Japan in Tokyo to attend a regional seminar titled 'Educational Research for Policy and Practice'. This meeting was sponsored by the UNESCO Asia-Pacific Centre of Educational Innovation and Development and followed similar meetings that had been held in Melbourne in 1995, in Bangkok in 1996, and in Tokyo in 1998. It was recognised at this time that there were several very active national educational research associations in the region including the All India Association for Educational Research, the Educational Research Association of Singapore, the Hong Kong Educational Research Association, the Australian Association for Research in Education and the New Zealand Association for Research in Education. The last four associations listed above had held a joint conference in Singapore in 1997. However, the discussions that had taken place over the past five years had indicated the need to establish an Asia-Pacific Educational Research Association.

From this regional seminar, the Tokyo Declaration on joint action to advance educational research for improved policy and practice in education in the Asia-Pacific region was issued.

> Recognising the rich and unique traditions, cultural diversity and common challenges – including obstacles of language and geographical separation – we, the assembled educational research leaders meeting in Tokyo in October 2000 under the auspices of the Japanese National Institute for Educational

Research and UNESCO, hereby commit ourselves to joint action to support
and advance the conduct and use of educational research to improve policy
and practice in the Asia-Pacific region.

To this end, we agree to establish an Asia-Pacific Educational Research
Association, the objectives of which will be to:

• promote collaboration of researchers in the region;
• facilitate the publication of Asia-Pacific research for improved educational
  policy and practice;
• organise professional meetings; and
• support the training and professional development of educational
  researchers in the region.

There are several reasons why improved collaboration among educational
researchers in the Asia-Pacific region is desirable. First, researchers frequently
work alone or in small research teams, sometimes unaware of similar research
being carried out elsewhere. Often, when research workers do look beyond their
own national borders, it is to Europe or to the United States, rather than to
research being carried out within the region. Language barriers and infrequent
opportunities to meet and consider research issues and findings have worked
against the development of a substantial and systematic Asia-Pacific body of
knowledge in education.

Second, educational change is occurring very rapidly in many Asia-Pacific
countries. However, these changes are often made on the basis of fashion or on
ideological grounds rather than on dependable research-based evidence. In addi-
tion, there is often little systematic evaluation of new initiatives. Since education
is a major area of public expenditure in all systems in the region, it seems
reasonable to expect that the allocation of resources and the introduction of
new educational processes and structures would be based on reliable research
evidence and subjected to systematic study and evaluation.

Third, there is recognition worldwide, that educational research could be
better directed towards pressing issues of policy and practice. Some educational
research is conducted with limited consideration for its practical implications or
subsequent implementation. Results often are communicated primarily within
the research community rather than to policy makers and practitioners. Regional
collaboration could be effective in identifying ways of enhancing the impact and
adoption of the findings of research in countries within the region. Greater
coordination and collaboration might also be effective in supporting the national
implementation of research findings and in enhancing the ways in which educa-
tional research is perceived, supported and used within the Asia-Pacific region.
Finally, greater cooperation among research workers in the Asia-Pacific region
is likely to be effective in enhancing levels of research expertise within the region.
Training workshops to introduce researchers to new research methods, if con-
ducted under the auspices of a regional association, are likely to be a very
effective way of raising the quality of research within the region (see *Training of
Educational Research Workers*).

2. NEW DIRECTIONS FOR RESEARCH IN THE ASIA-PACIFIC REGION

The Asia-Pacific region contains countries and school systems at very different stages of development. Consequently, it is perhaps not surprising that each school system has its own unique set of problems that require research in order to facilitate the resolution of these problems. Thus it is difficult to summarise the new directions for research within the region. Nevertheless, among the 14 education systems that sent representatives to the Regional Seminar in Tokyo in October 2000, there were few issues or problem areas that were cited by a particular system that were not referred to by another system within the region. It is clear that the education systems of these countries are not so disparate that they do not have something to discuss and learn from the research being carried out in a neighbouring system within the region.

Perhaps the issue that was most common across systems involved the nature of the curriculum, which was already seen to be overburdened, and yet needed reform with new curriculum areas included, or existing curriculum areas extended in order to meet the changes that were occurring rapidly within society. Many systems were concerned with the inculcation of moral values among their youth, and this area relates to concern for adolescent behaviour, life skills and the structure of schools in the future, as well as preparation for adult life, that involves lifelong learning and development. Several systems were concerned with issues and problems relating to information technology and the individualisation of education. Furthermore, many systems were interested in the policy making process and the implementation of change since there was recognition that the simplistic view of direct implementation was no longer adequate at a time of rapid change.

The problems encountered in the region not only differ among the countries within the region, but also differ from those that are present in the other major zones of the educational world, North America, Latin America, Europe and Africa. Consequently, the turning to Europe and North America for guidance by the countries within the region would no longer seem appropriate. Only countries on the fringe of the Asia-Pacific region like Australia and New Zealand, because of both their location and their traditions are likely to make gains from occasionally turning to Europe and North America. The time has come for by far the great majority of education systems within the Asia-Pacific region to see that they are part of a dynamic and vibrant zone of a world in which changes are occurring at an increasing rate.

It was within this context that a decision was made to review the field of educational research in the Asia-Pacific region and to publish on behalf of the Asia-Pacific Educational Research Association a *Handbook of Educational Research in the Asia-Pacific Region*. This *Handbook* would focus on the problems and issues facing education at all levels in the region. It would also review the findings of the research that has been conducted within the region, and would provide new directions for research in the decades ahead that would be directed

towards the problems confronting education in the region. The pages that follow in this *Overview and Introduction* contain the views and writings of scholars who are concerned with the problems of educational policy and practice in the Asia-Pacific region. Most, but not all authors, live or work in the region. Their writings reveal the strength and extent of research that has been conducted or is currently being undertaken in the region, but has remained hidden because of the dominance of the journals and books that are issued in Britain and the United States and that are published in the English language. In countries like China, India, Japan and Korea in particular, there is a wealth of findings of research studies in the field of education that are reported in the national language of the country and that are not seen outside their country of origin. Unfortunately, this *Handbook* does not achieve full access to this large body of research findings. Nevertheless, it does represent an initial attempt to present information on the research being carried out in the Asia-Pacific region. Furthermore, the authors contributing to the *Handbook* argue strongly for greater collaboration between educational research workers in the Asia-Pacific region. They seek to foster the sharing of the findings of research across the countries of the region that have common problems, which differ from those of the more highly developed countries that currently dominate the field of educational research.

This *Handbook* is prepared as a source book of ideas for those who advise policy makers and practitioners in education. It is too large to have a strong appeal to politicians and policy makers who must draw on the counsel and advice of policy analysts. Moreover, it is too large to appeal to many teachers in schools who must obtain guidance from teacher educators as well as superintendents and administrators of school systems. The *Handbook* is written for these people who need to keep abreast of the latest findings from educational research studies in order to foster change and development in both policy and practice in schools and education systems. The *Handbook* should also prove to be very useful for graduate students, who are planning research studies, as well as research workers in education who seek support in their work from replication through similar studies conducted in different settings, or who seek ideas for future investigation. Likewise, curriculum developers and teachers at university and college levels need to be well-informed about the changes that are occurring in the field of education in the region and the relevance of the findings of research for curriculum development and teacher education programs. With these many different users of this *Handbook* in mind, the editors argue very strongly for the development of a sense of unity in the field of educational research. There is increasing variety in the strategies and tactics that are employed in research into educational problems, as well as in the methods of inquiry, theoretical perspectives and procedures of analysis that are used to investigate the practices and processes of education, the contexts and conditions under which educational services are provided, and the policies and products that influence change and development. Nevertheless, there is a unity of purpose that cuts across the different disciplinary perspectives and approaches to inquiry that are employed.

The purpose of scholarly inquiry and research in education is the building of a coherent body of knowledge that has been examined against evidence from the real world and that is available for transforming the real world through human agency and social action. This *Handbook* presents the coherent body of knowledge that is currently available and is related to educational policy and practice in the Asia-Pacific region (see *Research in Education: Nature, Impact, Needs and Priorities*).

3. THE STRUCTURE OF THIS HANDBOOK

The articles in this *Handbook of Educational Research in the Asia-Pacific Region* are assembled in eight major sections:

(a) Trends and Issues,
(b) Access and Equity,
(c) Learning and Human Development,
(d) Curriculum and Technical Education,
(e) Teaching, Teachers, and Teacher Education,
(f) Organisation and Management of Education,
(g) Educational Research and National Development,
(h) Towards the Future.

The structure of the *Handbook* is in many ways greatly influenced by a decision that the *Handbook* should be contained in two volumes, each of approximately 700 pages for the purposes of printing and production. This demands that the length of articles must necessarily be limited, which has required that the initial drafts of some articles unfortunately needed substantial pruning, so that the articles did not exceed the specified word limit. In total, 90 articles were sought with each article not exceeding a word limit of 6000 words. The use of sections served primarily the purposes of sub-dividing the workload of inviting contributing authors and the supervision and editing of contributed articles. The use of section editors and the general editors also ensured that each article was systematically reviewed by two reviewers who examined the material presented in each article for content, style and appropriateness for inclusion in the *Handbook*.

At the beginning of each of the six middle sections there is an introductory article, written by the section editor that not only reviews developments in the area and discusses issues, but also comments on how the entries in the section are clustered together and organised for reference purposes. Thus, within each section, and where sub-sections also exist, the articles are grouped in such a way as to provide a coherent perspective across the topics considered in the articles that contribute to the particular section or sub-section. The sections that comprise the complete volume seek to focus on the major issues that are seen to confront educational research in the region. In a similar way the topics that are addressed in each of the articles seek to direct attention to particular problems

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Trends in Educational Reform in the Asia-Pacific Region*

YIN CHEONG CHENG
Hong Kong Institute of Education, Hong Kong

1. INTRODUCTION

Educational reform in the Asia-Pacific region, which is one of the fastest develop-ing areas in the world, is receiving strong and intensive local and global attention. Since the 1990s, huge national resources have been invested in education and related initiatives in nearly every country in the region for bringing about substantial improvement and development in many different aspects of society (Cheng & Townsend, 2000). Unfortunately, many countries are still very disap-pointed with their education systems in view of the challenges of the new century. In order to redress the problems in their education systems, more and more reforms are now proposed to improve the practice and effectiveness of education at different levels. The major question to be asked is: what lessons can be learnt and shared from these ongoing educational reforms in the region such that we can avoid repeating failure, thus, preparing for policy formulation and implemen-tation of educational changes in each of our own countries?

Particularly for policy makers, educators and researchers, the following ques-tions should receive due attention in considering educational reform.

- What are the major trends and characteristics of the ongoing educational reforms in this region? The answer to this question will furnish a basis for delineating an overall profile for understanding the direction, nature and progress of the national initiatives and efforts in the region.
- What are the major challenges that the policy makers and educators are facing in the current educational reforms particularly in such a new era of globalisation, information technology, competition and the knowledge-driven

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economy? The answers will provide a common ground for sharing the concerns, discussing issues, exchanging ideas and even developing related strategies to cope with the challenges.

• What implications can be drawn from these trends and challenges for research? The answers may bridge the gaps between research and policy-making, for a knowledge base can then be built by research to inform policy-making and practice.

In response to the concerns with educational reforms in the region, a group of scholars in the region had already begun in 1997 to organise a symposium of country reports to describe and analyse the educational changes and developments that had occurred in mainland China, Hong Kong, Korea, Malaysia, Singapore, Taiwan and Thailand. These reports were then edited and published as a special issue in *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice* (Cheng, 1999a).

Following this issue, a broader and larger regional effort was organised in 1999 to continue the discussion on educational change and development. In addition to the country reports from Hong Kong, Japan, Korea, Malaysia, P.R. China, Singapore, Taiwan, and Thailand for sharing among a wide readership are country reports from Australia, New Zealand and the Islands in the South Western Pacific. These reports were then edited and published in the form of a book chapter in *Educational Change and Development in the Asia-Pacific Region: Challenges for the Future* (Townsend & Cheng, 2000).

These scholarly efforts are not undertaken in a vacuum, as the educational reforms in the region have received increasing attention from both national and international organisations. In October 2000, the National Institute for Educational Policy Research of Japan and United Nations Educational, Scientific and Cultural Organisation (UNESCO) organised an international seminar on educational research for improved policy and practice in the Asia-Pacific region. At the conference, participants from different countries and organisations in the region presented their country reports on educational reform and discussed the current issues regarding the relationship between educational research and policy making. The reports were from a wide range of countries and areas in the region, including Australia, China, Hong Kong, India, Indonesia, Japan, Lao P.D.R., Malaysia, New Zealand, Philippines, Korea, Sri Lanka, Thailand and Vietnam.

With the support of delegations from more than 16 countries, the Hong Kong Institute of Education also organised in February 2001 an international forum on educational reform in the region. The plenary country reports revealed a wide range of experiences and progress of educational reforms in different countries and areas in the region. At the forum, educators, policy makers, researchers and practitioners had intensive and stimulating discussion on the trends and directions of educational reforms in individual countries and the whole region, in response to the impact of globalisation and technology,

the demand for localisation and the expectations of individualisation in education in the new century.

In July 2001, the Office of the National Education Commission in Thailand organised another international forum on educational reform, with the support of a number of national and international organisations. Again, this international forum represented the continuing national and regional effort and commitment to educational development and change with a hope of meeting the challenges of the new millennium. The representatives of selected countries, in the region with some from the United Kingdom and the United States, reported their country experiences in formulating and implementing educational reforms and related strategies.

Since 1998, the *Asia-Pacific Journal of Teacher Education and Development* (*APJTED*) has published numerous articles and country reports on the change and development in teacher education in the region. The articles, particularly country reports at the symposium of Korea (2000, Vol. 3, No. 1), of Singapore (1999, Vol. 2, No. 1), of Malaysia (2000, Vol. 3, No. 2), of Australia (Vol. 1, No. 2) and of China (Vol. 4, No. 2), as well as those from Taiwan, Thailand and India, are being released in *APJTED*, and are an important source of information for understanding the context and issues of educational reform in these countries.

2. MAJOR TRENDS IN ONGOING EDUCATIONAL REFORM

The above country reports and documents become the updated, comprehensive and relevant sources of information for understanding the trends and issues of educational reform in the region. Based on these reports and documents, this article aims to provide an overview of the trends in educational reform in the Asia-Pacific region in recent years. It addresses the first of the three questions posed in the preceding section, with the other two questions (regarding challenges and implications from these trends for research) to be addressed in a later chapter in the closing section of this Handbook (see *Challenges for Research into Educational Reform in the Asia-Pacific Region*).

After reviewing the above reports with reference to Cheng (1999a) and Cheng and Townsend (2000), some major trends of ongoing educational reforms in the region can be observed and are discussed in the following paragraphs. The discussion that follows is guided by a conceptual framework for a four-level analysis which reflects the scope, focus and general nature of the trends, as shown in Figure 1. In brief, at the macro-level, the main trends include: (a) towards re-establishing new national visions and educational aims; (b) towards restructuring the education system at different levels; and (c) towards market-driving, privatising and diversifying education. At the meso-level, (d) towards parental and community involvement in education and management is a salient trend. At the site-level, the major trends are: (e) towards ensuring education quality, standards and accountability; (f) towards decentralisation and school-based management; and (g) towards enhancement of teacher quality and continuous lifelong professional development of teachers and principals. At the

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Achieving Education for All in the Asia-Pacific Region

RUPERT MACLEAN
UNESCO-UNEVOC International Centre for Education, Bonn, Germany

KEN VINE
University of New England, Armidale, Australia

1. INTRODUCTION: THE QUEST TO ACHIEVE EDUCATION FOR ALL

The Education for All movement has gained considerable momentum through-out the world over the past ten years, as countries work increasingly closely together to stamp out illiteracy and so empower individuals and their communities and help create a better quality of life for their citizens. This is to be expected, for as the Organisation for Economic Cooperation and Development (OECD) has noted the attainment of basic literacy and numeracy skills has been identified repeatedly as the most significant factor in reducing poverty and increasing participation by individuals in the economic, political and cultural life of their societies (OECD/DAC, 1996). This realization is not new, and is not limited to organisations like the OECD. Many development agencies such as the Swedish International Development Co-operative Agency (SIDA, 2001), the World Bank (1997, 2000), the Department for International Development in the United Kingdom (DFID, 2000), and non-government organizations such as Oxfam (Watkins, 2000) strongly share this same view.

More than 50 years ago, the nations of the world, speaking through the *Universal Declaration of Human Rights*, asserted that "everyone has a right to education". Yet world-wide, and particularly in the Asia-Pacific region, the current provision of education remains seriously deficient. The situation is so serious that many governments and members of the international aid community believe that more decisive and better coordinated action must be taken if education and schooling are to be made relevant, to improve qualitatively, and to be universally available to all. Education as a fundamental right for all people, women and men, of all ages, world-wide is regarded as crucially important to the welfare of humankind. The reason is that effective education can help ensure

a safer, healthier, more prosperous and environmentally sound world, while simultaneously contributing to social, economic, and cultural progress, tolerance, and international cooperation. It contributes to economic, social and political development, to rising income levels and to improved standards of living. Sound basic education is also fundamental to the strengthening of higher levels of education and of scientific and technological literacy and capacity and thus to self-reliant, sustainable development. In addition, as the *Report to UNESCO of the International Commission on Education for the Twenty-first Century* (Delors Report, 1996) has so persuasively argued, education is not just a human right but is also fundamental to the survival of our human societies.

The term 'education for all' does not just concern itself with primary education for all, but is concerned with six key target dimensions, these being:

- expansion of early childhood care and development;
- universal access to completion of primary education;
- improvement in learning achievement;
- increase in adult literacy rates;
- expansion of provision of basic education and training in essential skills required by youth and adults; and
- increased acquisition by individuals and families of the knowledge, skills and values necessary for better living and an improved quality of life.

Despite notable efforts by countries around the globe to ensure the right to education for all, the current reality is that, worldwide: (a) more than 100 million children, including at least 60 million girls, have no access to primary schooling, while millions more attend school but do not acquire essential knowledge and skills; (b) more than 960 million adults, two-thirds of whom are women, are illiterate, while functional illiteracy is a significant problem in all countries, industrialized and developing; and, (c) more than one-third of the world's adults have no access to the printed knowledge, new skills and technologies that could improve the quality of their lives and help them shape, and adapt to, social and cultural change.

At the same time the world faces a wide range of other daunting problems which adversely impact on the ability of countries to strengthen and upgrade education and schooling, most notably: (a) mounting debt burdens, (b) the threat of economic stagnation and decline, (c) rapid population growth, (d) widening economic disparities among and within nations, (e) war, (f) occupation, (g) civil strife, (h) violent crime, (i) the preventable deaths of millions of children, and (j) widespread environmental degradation. Some argue that these problems constrain efforts to meet basic learning needs, while the lack of basic education among a significant proportion of the population prevents societies from addressing such problems with strength and purpose (*World Declaration on Education for All*, 1990a). However, it may also be argued that for many developing countries it is not only a lack of resources, but also a matter of government priorities, where a greater proportion of GNP is spent on so-called 'weapons of

war' (such as armies, tanks and armaments) than on 'weapons for peace' (schools, health care and clean water).

Whatever the root causes of these problems, over the last decade they have led to major setbacks in improving basic education in many of the least developed countries. In some other countries, economic growth has been available to finance educational expansion but, even so, many millions remain in poverty and are unschooled or illiterate. In certain industrialized countries, too, cutbacks in government expenditure have led to the deterioration of education in terms of access, equity and quality assurance.

As a result of such problems, in order to ensure everyone has a better opportunity to exercise their right to education, governments, along with international aid organizations and members of civil society, decided in 1990 to band together at the World Conference on Education for All (EFA), in Jomtien, Thailand, to make a concerted effort to achieve education for all (EFA) by the end of the year 2000. At this international conference on EFA, some 1,500 participants comprising delegates from 155 governments, policy makers and specialists in education and health, social and economic development from around the world, met to discuss major aspects of education for all. Representatives were ambitious in their goals, in that they agreed to take combined action to universalize primary education, massively reduce illiteracy, and to work together towards making basic education available to everyone, by the end of the twentieth century.

The *World Declaration on Education for All* (1990a) and the *Framework for Action to Meet Basic Learning Needs* (1990b), adopted at Jomtien, foresaw the need for an end-of-decade (2000) assessment of progress as a basis for a comprehensive review of policies concerning basic education. The World Education Forum (Dakar, Senegal, April 2000) was the first and most important event in education at the dawn of the new century. Unfortunately no region of the world was successful in achieving the goal set at the Jomtien conference of achieving EFA by 2000 and so, by adopting the *Dakar Framework for Action*, the 1,100 participants of the Forum reaffirmed their commitment to achieving Education for All, this time by the year 2015.*

2. CONTEXTUAL FACTORS: DEVELOPMENT AND EDUCATION

The region of Asia-Pacific, which is home to almost 60 per cent of the world's population, is outstanding for the vast range of diversities that encompass almost all aspects of life, whether geographical, socio-economic, cultural, political or developmental. In this region there are countries of vast landmasses (China,

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* In addition, six years after the Jomtien Conference, the Mid-Decade Meeting of the International Consultative Forum on Education for All, in Amman, Jordan (June 1996) brought together some 250 decision-makers from 73 countries, including ministers of education, and multilateral and bilateral agencies and non-governmental organizations. Their aim was to assess the advances made since the Jomtien Conference, and to take stock of progress and shortcomings to enable adjustments to be made prior to and as a run up to the end of decade EFA evaluation.

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Educational Expenditure and Participation in East Asia and Australia

GERALD BURKE, ROBERT LENAHAN and HING TONG MA

Monash University – ACER Centre for the Economics of Education and Training, Melbourne, Australia

1. INTRODUCTION

This article reviews (a) the population and income levels of some selected economies to provide a broad indication of their educational need and of the capacity to finance them; (b) the main features of the level of participation in education, the resources provided, and the degree of public and private provision and finance; and (c) education strategies pursued in the selected economies. The article draws on an earlier study by Lenahan, Burke and Ma (1998) of educational expenditure and participation in selected economies in the Asia-Pacific region. The economies considered here in order of their income per head in 2000 are Japan, Hong Kong, Australia, Singapore, Republic of Korea, Malaysia, Thailand, Philippines, China, Indonesia and Vietnam.

There are considerable deficiencies in the data available, which means that the information presented and the findings of the article must be considered as tentative. The data limitations include the time lags involved in collecting and presenting data by the international agencies, inconsistencies in the nature of data presented in the various international publications and absence of any data at all for certain time periods and certain economies. The article relies mainly on data from UNESCO, *Education at a Glance, OECD Indicators* reported by the OECD (2001) and *World Development Indicators* reported by The World Bank (2001).

2. POPULATION AND POPULATION CHANGE

The populations of the selected economies vary enormously. Population data for all of the selected economies for the year 2000 are given in Table 1. The huge range of population sizes is illustrated by these data. China has a population

Table 1. Indicators of population and national product

Economy	Population (millions) 2000	Population average (annual growth rate %) 1980–2000	Population average (annual growth rate %) 2000–15	Population (% aged 0–14) 2000	GNI per capita (US$) 2000	GNI per capita ($PPP) 2000	GDP per capita (% average growth per annum) 1990–00
Japan	127	0.4	−0.1	15	35,620	27,080	1
Hong Kong	7	1.5	0.6	16	25,920	25,590	2
Australia	19	1.3	0.8	21	20,240	24,970	3
Singapore	4	2.5	1.3	22	24,740	24,910	5
Korea, Repub	47	1.1	0.4	21	8,910	17,300	5
Malaysia	23	2.6	1.5	34	3,380	8,330	4
Thailand	58	1.3	0.8	27	2,000	6,320	3
Philippines	76	2.5	1.7	38	1,040	4,220	1
China	1,263	1.3	0.7	25	840	3,920	9
Indonesia	210	1.7	1.2	31	570	2,830	3
Vietnam	74	1.9	1.2	33	390	2,000	6

Source: World Development Indicators (World Bank, 2001) and *Education at a Glance* (OECD, 2001).
Gross National Income in US$ estimated by World Bank Atlas method, mainly using exchange rates.
PPP – Purchasing power parity dollars, i.e. converted at the rate that would equalise the cost of a similar basked of goods and services across countries.

nearly 70 times as large as Australia. The smallest ones are Hong Kong and Singapore. The rate of growth of population in the selected economies is slowing. The simple average population growth rate from 1980 to 2000 was 1.6 per cent per annum but is projected to fall to 0.9 per cent. The projected rate is highest for the Philippines at 1.7. The population is falling in Japan.

3. STUDENT-AGE POPULATION

The growth in population, and whether it is by natural increase or migration, affects the age distribution of the population. The relative size of the young population provides some insights into the demand for education. Column 4 in Table 1 presents the percentage of the population aged 0 to 14 years. This gives an indication of likely enrolment in the compulsory years of education in the coming year. Consistent with the data for population growth, the richer countries tend to have low proportions of their population in this age group. Only 15 per cent of Japan's population is in this category whereas Vietnam and the Philippines have a third of their total population in this group. The additional burden of educational provision for these countries is clear.

4. FINANCIAL CAPACITY

Measures of national income or national product can be used to provide an indication of the standard of living in a country and also of the capacity to provide for social services including education. The data in Columns 5 and 6 in Table 1 show the gross national income per capita of the selected economies estimated at current exchange rates and by the purchasing power-parity method (PPP), which is based on a conversion factor representing the cost of an equivalent basket of goods and services for all countries. Column 7 gives the average annual rate of growth of the period in per capita GDP for the period 1990 to 2000.

There are four high-income economies, Japan, Hong Kong, Australia and Singapore. They have a Gross National Income (GNI) per capita of $25,000 to $27,000 on the PPP measures. Korea is not far out of the high-income group. Malaysia is in an upper middle group. Thailand, the Philippines and now China, with its very rapid rate of economic growth, are classified as lower middle-income economies. Indonesia with particular economic problems in the period since 1997 has fallen to the low-income list. It joins Vietnam which is growing rapidly from a very low base. The average rate of growth of the lower or low income economies is higher than for the rich countries, but their income is relatively very low and the demands of their population structure is high.

5. EDUCATION SYSTEMS AND THEIR FINANCING

This section provides a broad overview of the extent of participation, the structures of the education systems of the selected economies, the main forms of