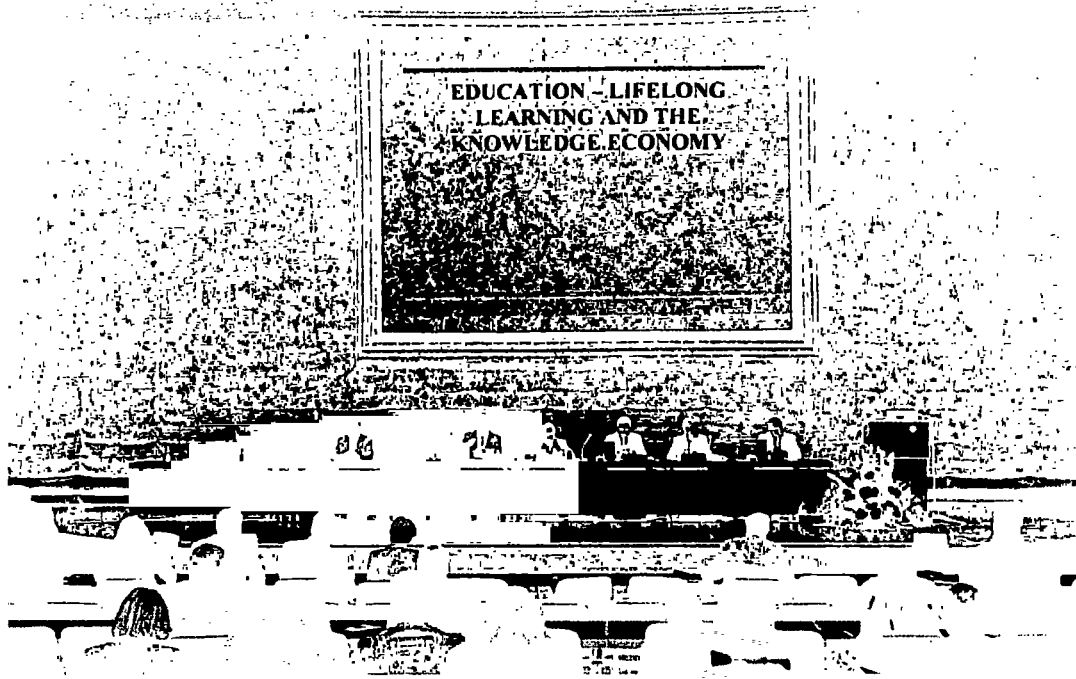


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# LIFELONG LEARNING AND THE KNOWLEDGE ECONOMY



Summary of the Global Conference on Lifelong Learning

STUTTGART, GERMANY  
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# Lifelong Learning and the Knowledge Economy

Summary of the Global Conference  
on Lifelong Learning organized by the World Bank,  
the Baden-Württemberg Foundation for Development-  
Cooperation, and the German State of Baden-  
Württemberg

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## INTRODUCTION

Economic growth is increasingly driven by knowledge, and no country can remain competitive without applying knowledge. Advances in the science and technology base across a wide range of fields, from information communication technology (ICT), to bio-technology, to science materials, provides potential for countries to accelerate and strengthen their economic and social development. The knowledge economy provides efficient ways to produce goods and services and deliver them more effectively, and at lower costs, to a greater number of people.

In addition to the danger of a growing digital divide, there is also a growing knowledge divide. There are striking disparities between rich and poor countries in their investment and capacity in science and technology (S&T). The poorest regions of the world have the lowest access to information and communication resources, but they can also leverage opportunities for leapfrogging as the dynamics of a knowledge-based economy are better understood. The World Bank World Development Report 1998-99 has developed an analytical framework emphasizing the complementary role of four key dimensions to help countries articulate strategies for their transition to a knowledge-based economy including: economic and institutional regimes, educated and skilled populations, information infrastructure, and national innovation systems.

Education is central to strengthening the human capital base which supports the pillars related to skill building and national innovation systems. This requires a holistic, approach to education development. A comprehensive program of lifelong learning education for dynamic economies encompasses all levels: early childhood development, primary, secondary, tertiary, and adult continuing education within the context of the overall development framework of each country. This also includes the areas covered by the Education for All (EFA) initiative as well as linkages with efforts to achieve the Millennium Development Goals (MDGs).

In the 21<sup>st</sup> century, workers need to be lifelong learners, adapting continuously to changed opportunities and labor market demands of the knowledge economy. Lifelong learning (LLL), therefore, is not a luxury for any country. Education systems in all countries will have to evolve in that direction. The objectives of World Bank supports a program on lifelong learning and post-basic education which includes not only exploring ways of increasing the quality and coverage of secondary and tertiary education, but also improving the policy framework to encourage a diversity of institutions, programs, and procedures that permit all people to access education— whether to upgrade their skills for the world of work or simply to satisfy a wish to learn. As a knowledge institution, the Bank looks for ways to better share knowledge with its clients and partners, and to increase the ability of client countries to access and use knowledge.

The Stuttgart conference was an opportunity to create new partnerships to promote the transformation of traditional education systems into a LLL environment that promotes learning throughout the life cycle, from childhood to retirement, in formal, non-formal and informal learning settings. The outcomes of this conference, summarized in the following pages, will serve as guideposts for further development.

*Ruth Kagia  
Education Director  
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## 1. BACKGROUND TO THE CONFERENCE

The conference was organized in response to the increasing realization that globalization, and the growth of the knowledge-based economy, pose economic and technological challenges to education systems worldwide. Education and training systems are at a turning point. Resources to improve access to education and boost its quality are scarce, on top of which ever more needs arise. The economic importance of knowledge and innovation is increasing, along with reliance on technology and demand for both traditional skills and new competencies.

People therefore need access to learning on an on-going, lifelong basis, which in turn requires a stronger alignment of institutions and policies to create high performance, learner-driven systems. While OECD countries have been adapting educational systems to these changes for some time, developing countries face a particularly acute challenge in this area. For example, they need to expand coverage to achieve universal access to basic education, as well as increased access to secondary and tertiary provision; improve the linkages between formal and non-formal education systems and the labor market; raise the quality of learning; and expand learning opportunities beyond initial formal schooling.

How developing countries respond to these challenges will profoundly affect their economic growth, human capital development and social cohesion. Donors are considering the issues, but the discussion so far has been limited in scope, and consensus on appropriate strategies to be adopted needs to emerge.

The overall goal of the conference was to identify policies needed for education and training systems to respond to the needs of the knowledge economy, and facilitate lifelong learning. Specific objectives were to:

- Understand different theoretical and analytical approaches to address this evolving issue.
- Take stock of the progress of developing countries in meeting the challenges.
- Identify issues for further research, discuss an agenda for action, and define next steps.
- Act as a catalyst to promote institutional partnerships around the issues, in particular regarding the need for bilateral and multilateral development agencies to elaborate new education and learning strategies in developing countries.

The conference examined six major issues affecting education systems in the context of developing lifelong learning.

- Key competencies needed to function effectively in a knowledge economy.
- Governance and management challenges, the role of public and private stakeholders.
- Financing of lifelong learning, including the role of public and private sources of finance.

- Opening pathways and developing articulation within and between different components of the education system (i.e., articulation between levels of the formal system and between the formal and informal systems) to facilitate lifelong learning.
- Addressing equity, inclusiveness, affordability and access issues for lifelong learning.
- Dynamics of knowledge generation, including linking education with science and technology.

The conference, was organized by the Baden-Württemberg Foundation for Development-Cooperation, in cooperation with the World Bank Group and the German State of Baden-Württemberg, and included 225 senior policy makers from government, the private sector, non-government agencies, and academics, bilateral and multilateral development agencies from 42 different organizations and countries.

A marketplace exhibition provided an interactive forum for information on education in the knowledge economy from governments, donors, companies and NGOs. Conference proceedings are summarized in this publication and papers and presentations are available at the conference web site until June, 2003<sup>2</sup> ([www.congress-lifelonglearning.org](http://www.congress-lifelonglearning.org)) and on the World Bank Education Sector Web Site ([www.worldbank.org](http://www.worldbank.org)) thereafter. Two related World Bank publications<sup>1</sup> were made available at the conference and can be obtained by contacting the World Bank Education Advisory Service via the World Bank Web Site. [www.worldbank.org/education](http://www.worldbank.org/education).

Two key questions emerged during many of the discussions: what is the knowledge economy, and what is lifelong learning? While there is no universal agreement, the following concepts are useful starting points, and are described in more detail in previously referenced World Bank publications.

- The knowledge economy is one that relies primarily on the use of ideas rather than physical abilities, and on the application of technology rather than the transformation of raw materials or the exploitation of cheap labor. The development of the knowledge economy is a continuum. Different countries, and different sectors in the same country, will be on different levels on that continuum.
- Lifelong learning is a method of organizing and delivering learning in a manner that is intended to be learner, vs. institutionally, driven. Lifelong learning encompasses learning over the entire life cycle (from early childhood to retirement) and all learning systems (formal, non-formal, and informal). Lifelong learning is increasingly important in the global changing economy. Lifelong learning is not a new learning system. It is more than just adult continuing education, and is essentially a rationalization of existing learning systems to make them function in an integrated manner for the best of individuals.

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<sup>1</sup> *Lifelong Learning in the Global Knowledge Economy: Challenges for Developing Countries*, Discussion Draft, Human Development Network, World Bank, 2002.  
*Constructing Knowledge Societies: New Challenges for Tertiary Education*, World Bank, 2002.

## 2. THE KNOWLEDGE ECONOMY AND LIFELONG LEARNING: CHALLENGES FOR DEVELOPING COUNTRIES

### a. Key challenges

These were outlined in introductory presentations made by Erwin Teufel, Minister President, State of Baden-Württemberg; James D. Wolfensohn, President, World Bank Group; and Valdas Adamkus, President, Lithuania.

The most important key to development and to poverty alleviation is education. This must start with universal primary education for girls and boys equally, as well as an open, dynamic system of secondary and tertiary education that includes adult continuing education, in an overall approach to lifelong learning. According to Mr. Wolfensohn, this had to be combined with a fundamental recognition that educating women and girls was central to the process of development. He also stressed the importance of education for peace.

The widening education gap between wealthy and poor countries largely explains why 4.8 billion people, who live in developing and transition economies, received only 20 percent of global GDP. In spite of advances it has made, Singapore recognizes that its education system needs to be made more flexible to meet the changing needs of labor markets. There is the danger of a growing “knowledge” divide, not just a “digital” divide, that three years ago, high income countries with 15% of the world population contributed 91% of research and development activities, while low-income countries with 40% of world population accounted for less than 1% of research and development expenditures. The poorest regions of the world also have the lowest access to information and communication resources. For every 1000 people in industrial countries, it is estimated that there were only 345 computers in 1999. But across developing countries, that number was estimated at only 17—in Africa 8.4 and in South Asia only 3.2. Viewed another way, wealthy countries have 15% of the world’s population but 80% of the world’s personal computers.

Economic growth is increasingly driven by knowledge, and no country can remain competitive without applying knowledge. The knowledge economy provides more efficient ways of producing goods and services and delivering them more effectively and at lower costs to a greater number of people. Computer speed has doubled every year, and prices for such equipment have fallen by half every 18 months; data transmission costs have fallen dramatically, bandwidth is growing worldwide, and Internet hosts are expanding and multiplying worldwide. Product development cycles are shortening in industrial countries, requiring more rapid innovation and a need for the private sector to play a bigger role in facilitating lifelong learning.

Accordingly, Mr. Wolfensohn and Mr. Teufel stressed that helping developing and transition countries join the global knowledge economy was essential to closing the gap with OECD countries. Baden-Württemberg is an example of a region that while it has few natural resources, has nonetheless managed to become a world leader in innovation and technology,

largely due to its excellent educational infrastructure, and firm commitment to education at all stages of life.

The key to bridging the knowledge divide is a seamless learning system that moves people from primary and secondary school, through university, to updating their skills in the workplace. Mr. Wolfensohn also saw opportunities for poor countries to use technology in their efforts to „catch up“ with the developed world.

Several of the Bank's key knowledge initiatives, such as the African Virtual University, which offers technology-based tertiary education, and the Global Development Learning Network, provide seminars and courses to build local capacity through a worldwide network of distance learning centers (one recently opened in Kabul), that help to increase developing countries' access to education at all levels.

Mr. Reck, from Deutsche Telekom summarized his companies involvement in E-Learning during a later session and described its components: linking German schools to the internet; facilitating adult learning projects; developing global learning platforms; and experimenting with various technologies in e-learning. E-learning advantages include being flexible in time and location, the ability to adjust to individual learning speeds, self-management, motivation, and interactivity; and consistent quality.

Valdas Adamkus, President of Lithuania, also emphasized the importance of developing strategies to cope with globalization and suggested, among other things, that the first step towards this adaptation is education reform. It is necessary to carefully assess the implications for schools, and organizations. In Lithuania there is a disconnect between the relevance of individual learning, education plans, and the economy. With regard to financing of LLL, the implications on taxation should be carefully assessed. There is a need for development of public-private partnerships, for better linkages between education and the workplace, for the development of appropriate regulatory framework, for a broadening of the defining of learning, for more information, guidance and counseling, for more emphasis on distance education, and for open higher education systems worldwide.

b. Implications for Developing Countries.

The implications for developing countries were defined by five speakers, representing developing and industrial countries, including: Raphael Chanterie, Chef de Cabinet, Commission for Education and Culture, European Union; Barry McGaw, Director, Directorate for Education, Organization for Economic Co-operation and Development (OECD); Naim Abu Hommos, Minister of Education, Palestinian National Authority; Ruth Kagia, Director, Education, Human Development Network, World Bank Group; Roland Hartung, CEO, MVV Energie AG, Germany.

Mr. Abu Hommos, in the first keynote address of the plenary, highlighted the need to consider the development of full knowledge societies—not just knowledge economies. He described the difficulties developing countries face in adapting their education systems to meet the challenges of the knowledge society, namely lack of sufficient funding to develop higher education programs in science and technology, insufficient educational strategies for

marginalized groups, lack of schools in remote areas, and a gap in the relationship between educational institutions and communities.

Perhaps the strongest point made by Mr. Abu Hommos was the notion that educating for peace was critical, particularly in regions where conflict is endemic. This could include the creation of an international education development fund to help developing nations establish high-quality curricula, not only for traditional learning, but also for life skills, languages, and technology; as well as other areas critical for countries to integrate into the information society; and to educate populations for peace.

Mr. Hartung, CEO of MVV Energie AG, underscored that investing in education was a key to help developing countries emerge from poverty by nurturing a human capital as foundation for economic development. As an example he cited the German dual training system, which combines theoretical instruction with practical training, as one model that developing countries might follow. The dual system gives secondary school students the opportunity to learn a trade while attending school, helping them to transition to working life with three years of practical job experience. While the dual system could be adopted by developing nations, Mr. Hartung clarified that it would be necessary to adapt any program to local cultures, and that flexibility as the key feature which makes the dual system at once attractive and practical as an option for developing countries—an imperative for the knowledge economy.

Ruth Kagia, Director of Education for the World Bank's Human Development Network, explained that developing countries must face the knowledge-based economy with stronger, quality education at all levels, so that local people can increase their productivity and competitiveness. This would require not only the challenge of a basic education for all, but also enhanced opportunities for learning and training at all periods of life. Better tertiary education is only one requirement of education for the knowledge economy. Catering to the learning needs of the entire workforce is also critical.

Ms. Kagia emphasized that education for the knowledge economy is no longer measured by time spent in the classroom, but by the quality of learning. There is a need to transform learning from teacher-directed to collaborative modes, from rote memorization to developing analytical capacity, and from terminal education to lifelong learning. Policy adaptations will play an important role in helping developing countries construct LLL frameworks, and no country can afford to ignore the need to modify outmoded, rigid, and unfair education systems. In addition to modifying teaching and learning, countries must also address governance, finance, and equity issues.

LLL will be more costly, and there is need for many different financing options to make it a reality even in the poorest countries. Providing better education and training opportunities over a lifetime will increase expenditures, although resources will also need to be used more efficiently and in different ways. There is also a need for cost sharing between the state, individuals, families, and employers, and the need to create fair, affordable, and sustainable alternatives to finance LLL such as vouchers, tax credits or loans.

Ms. Kagia introduced the World Bank's draft report on Lifelong Learning in the Global Knowledge Economy: Challenges for Developing Countries and asked for participants to comment on the report.

Mr. McGaw, Director of the Directorate for Education at the Organization for Economic Cooperation and Development (OECD) reviewed the characteristics of lifelong learning and the rationale for investing in it, building upon a solid basic education. He then summarized for participants results from the OECD's Program for International Student Assessment (PISA), which showed that OECD countries do not perform equally well in achieving quality and equity in education; using its statistics, he described significant variations among countries and within countries, emphasizing how the varying backgrounds of students and schools affect student performance, but showing how some countries have nonetheless managed to achieve a high overall mean performance. Gender differences in reading and math were some of the most striking data, showing girls favored in reading and boys favored in math, with greater variation in scientific literacy.

Mr. McGaw stressed that the OECD experience is indeed relevant for developing nations, reminding participants that some OECD countries are only recent developers. Korea was cited as an example of a country which has experienced significant economic growth since the 1960s and also ranks second among OECD nations in percentage of GDP spent on education. Perhaps the strongest point made by Mr. McGaw was that lifelong learning provided a framework for equity, permitting individuals to access education at varying levels for varying needs without discriminating against their age or socio-economic status. Late entry into education is costly and a significant barrier—that multiple entry pathways and financing options are needed to leverage the benefits of lifelong learning equally, and to raise skill levels fairly in all countries.

Mr. Raphael Chanterie, Chef de Cabinet of the European Union's Commission for Education and Culture, outlined the European Commission's (EC) guidelines for the development of lifelong learning policies within the European Union. These include increasing recognition of qualifications and competences from one member state to another (European Credit Transfer System), investing more time and money in learning with the public sector retaining a key role in financing basic education and the private sector taking a bigger share in financing lifelong learning, and ensuring basic skills for participation in the knowledge economy (math, foreign languages, basic ICT skills, entrepreneurship and social skills).

Mr. Chanterie said that many of the principles behind the EU's education and training policy for lifelong learning are applicable in the developing world. The recent adoption by the EU of a Communication on 'education and training in the context of poverty reduction in developing countries' which aims to improve the effectiveness of EU funding and policy impact, and called for a better coordination and complementarity of aid to education between donors to enhance overall aid efficiency. The Commission's strong commitment to the Millennium Development Goals (MDGs) on education in developing countries, as well as the Education for All (EFA) framework, was noted and the idea that the impetus for implementation must come from national governments firmly committing themselves to put education high on the political agenda, and to provide adequate financing.

Questions from participants indicated they were most concerned about the lack of information and data available to make judgments about lifelong learning in developing countries. It was also noted that there is a lack of information currently available on returns to education and the varying strengths of different learning "models". There was some discussion on whether education indicators established in Europe were truly relevant for developing nations, and some participants warned of the dangers of simply exporting "developed country education models" to the developing world.

c. Bridging the Knowledge Gap

This topic was addressed by Nieves Confesor, former Minister of Labor in the Philippines; and by Walter Döring, Minister of Trade and Industry, State of Baden-Württemberg and Chairman of the Baden-Württemberg Foundation for Development-Cooperation.

Ms. Confesor addressed the question of the knowledge economy and inequality, and observed that education, LLL, and the knowledge economy are, in some cases, widening the gap between rich countries and poor countries, and between the rich and the poor within countries. Most of the world's poor are not familiar with the internet, and they were therefore not sufficiently important as a potential market to bend the web in their direction. To resist these tendencies of the knowledge economy to promote these inequalities, Ms. Confesor called for efforts to make human development and the knowledge economy more responsive to the needs of poor people. An example of a success story in this regard, is the initiative by Grameen Bank to provide cell phones to the poor women to improve their communications and access to information, and therefore to improve their marketing.

Mr. Döring emphasized the role of education in Baden-Württemberg's development and described the high level of support which Baden-Württemberg provides for education, and attributed this to the considerable commercial success of Baden-Württemberg's enterprises—especially the specialized automobile industry which is based there. In particular, Mr. Döring cited the dual training system as the source of skills for the development of the automobile industry in Baden-Württemberg, and R&D partnerships with the more-than-80 tertiary-level educational institutions in Baden-Württemberg as the source of innovation which kept Baden-Württemberg's products at the cutting edge of the industry, maintaining its commercial success and competitiveness.

The most notable element of the presentation was that human capital development in the form of solid basic education and training, and heavy investments in R&D and lifelong learning plays a particularly important role in maintaining competitiveness in the price-inelastic, upper spectrum of markets, where products are often differentiated more on the basis of quality and innovation than price. Germany's manpower is expensive, and Stuttgart has no particular transport or location advantages. For this reason, Baden-Württemberg does not try to compete on the basis of price, but on the basis of quality—and especially, innovation. Education, LLL, and R&D partnerships have played a key role in the success of this strategy.

Mr. Döring said these are expensive investments, and few of the Bank's clients could afford investments on the scale of Baden-Württemberg's. In view of this, one could ask are there any lessons to be drawn from Baden-Württemberg's experience in investing in human development and knowledge creation? Are investments in skill formation more appropriate at early stages of development, and investments in knowledge creation and innovation more appropriate at later stages?

The OECD presentation (see previous section) used the latest round of PISA results to document the growing gap in learning achievement in Germany. Unlike many countries, where learning achievement is convergent, Germany is rapidly becoming more unequal in terms of learning achievement. What is responsible for this development? Does it reflect differences between the native German population and the immigrant population? Is inequality in learning achievement in Baden-Württemberg more or less of a problem than in other regions? Does Baden-Württemberg's otherwise successful human development and knowledge creation strategy contribute to the problem?

The session stimulated a discussion on how policy could be used to make human development investments and the knowledge economy more inclusive of poor people. As other examples of interventions to lower barriers to the knowledge economy for the poor, Ms. Confesor cited a skills training program in Singapore which is financed by a tax on hiring unskilled labor, and the use of external grant funds to buy down interest rates for student loans targeted to the poor. She remarked that as Labor Minister she had been unsuccessful in persuading her cabinet colleagues to support a vocational training levy in the Philippines. Such levies are sometimes opposed by development agencies because they earmark revenues, which infringe on budgetary discretion, and raise the cost of job creation. The OECD findings, allied with Ms. Confesor's reflections, may suggest the need for a more nuanced approach.

### 3. RESULTS OF THE WORKING GROUPS

#### a. Key Competencies for the Knowledge Economy

Presentations were made by Dominique S. Rychen, Manager of the DeSeCo Program, Switzerland; Albert C. Tuijnman, Director of the Institute of International Education, Sweden; and Pamela Mellado Morales, Ministry of Economics, Chile. This was followed by a discussion.

Ms. Rychen presented the DeSeCo learning framework and then discussed its implications for the emergence of the knowledge economy. The concept of competence refers to the ability to meet individual or social demands successfully or carry out an activity or task effectively. It consists of both cognitive and non-cognitive dimensions. Competence is not the same as skills, it is not limited to what is taught in school and is not easily measured.

There are three categories of competencies: (i) acting autonomously; (ii) using tools interactively; and (iii) functioning in socially heterogeneous groups. Each category of competency consists of a set of inter-related practical and cognitive skills, knowledge, attitudes, and values, that together can be mobilized for effective action.

Competencies are only observable in the actions a person undertakes in a particular situation, they can be acquired and developed throughout life, and can be learned in a variety of institutional settings. Any particular competence can be developed through interactions in both formal and informal settings. Education institutions provide only one such setting. Others include the family, workplace, social networks, religious and cultural organizations, mass media, etc. .

The development of critical thinking and a reflective and holistic approach to life on the part of the individual is essential in order to cope with the complex demands of today's world. Creative abilities are more and more important to face the challenges of the emerging knowledge economy and information society. Basic skills are the foundation to the continuous enhancement of individual competencies.

Mr. Tuijnman discussed the challenges faced by policy-makers and analysts in institutionalizing LLL in the context of globalization. There are two dimensions to this challenge. One, relating to time, refers to the fact that people need to constantly update their skills and knowledge in order to cope with the rapid changes occurring in today's workplace and in all spheres of knowledge. This is the „life long“ dimension of learning.

The second relates to the space dimension and refers to both the need for continuous updating of knowledge and skills, and also to the need of individual to continuously expand their areas of expertise and knowledge. This is the „wide“ dimension of learning.

LLL provides both human and social insurance against the uncertainty and unpredictability of the modern world. It provides a response that is demand-driven, individual and continuous (not front loaded), and takes place in a context of partnership and collaboration. LLL calls for major reforms in the management of education systems and institutions. Current information systems must change dramatically since the knowledge economy puts a high

premium on outcomes, as derived from a set of competencies and related skills, and less on qualifications.

Policy-makers increasingly need information with predictive capacity. In this context, the value of education attainment diminishes over time while the value of measuring skills and competencies increases. However, it is important to bear in mind that while some people will continue to learn, and polish and develop their skills, other will lose them. This type of change (or lack of it) will become a new source of inequality. Information systems must be able to account for this.

Since new information systems focus on competencies, the school-oriented approach to assess attainment will be losing its validity and a new type of information would be needed. All of this presents new challenges for policy makers and analysts both at the conceptual as well as at the measurement levels. Current efforts to measure skills do not address what is happening in the adult population. The adult literacy and life skills survey is a step in the right direction to assess the skills of this population.

Another important challenge is to understand how the informal system interacts with the non-formal. Currently there are systems that can help track what happens in the formal system but they are unable to show what happens in the other systems, let alone to visualize how they interact.

Ms. Mellado argued that, using the results of the International Adult Literacy Survey (IALS) and PISA, it is safe to conclude that Chile lacks a population with the skills and competencies demanded by the emergent knowledge economy. Considering that 85% of the adult population scored under level 3 in IALS—the minimum standard to actively participate in the knowledge base society—and that 42% of that population has less than 12 years of formal education, Chile must invest significantly more in order to be in a more competitive situation.

This is compounded by big disparities in educational attainment observed between rural and urban populations, and also by disparities observed between workers in small and big enterprises. These are two very different worlds that should be brought closer together.

In order to close these gaps, Chile is implementing a series of programs and initiatives involving not only the education sector but also the industry and business community. One of these initiatives is the project „Chile Califica“ (Life Long Learning and Training Project) which is partially funded with a loan from the World Bank. The private sector is heavily involved in this project both in the provision of learning opportunities as well as in the establishment of a national system of competencies and of professional-vocational pathways in four key sectors of the economy.

Chile faces enormous challenges to design programs targeted at adults, and in the use of alternative delivery methods, such as distance learning, to deliver those programs. One significant obstacle is the resistance of teachers to the idea that the old „back-to-school“ approach no longer works to educate and improve the knowledge and skills of adults. Teachers have become a force of enormous resistance to change.

The discussion addressed the following questions and reached some tentative conclusions as follows:

- **DeSeCo framework, has it been validated?** Not really but extensive consultation took place during its formulation involving labor, business, academia, policy makers, etc. This has been complemented by specific country contributions from members of OECD. The DeSeCo project has been working in parallel with the „Measurement of Skills Project“.
- **Is the framework valid for developing countries?** The question is not so much if the framework is valid or not but how can developing countries develop a framework that is relevant to their situation, needs, culture history and future paths. It must be noted that the three categories of competencies are very general, as such they can have broad validity but the real challenge is to define the concrete cognitive and non-cognitive dimensions that would help individuals in specific settings meet individual or social demands successfully or carry out an activity or task effectively.
- **Why is so little is known about information requirements to assess the linkages between formal, non-formal and informal learning ?** Although it is clear that there are substitutions and complementarities between the three levels, very little is known about how knowledge and skills acquired in the informal sector can be validated.. Thus the question that remains open is, how to develop linkages between the three levels of system given that so little is known about how to validate skills and competencies.
- **Why so little available empirical data?** Conducting evaluations that are relevant to the challenges of the knowledge economy and LLL, is limited by lack of empirical information and data. This is also affecting development cooperation between donor agencies and developing countries, and among the agencies themselves. There is an urgent need to empower the South to develop its own approach and framework through appropriate research and dialogue, along with a need to make a concerted effort to involve new partners, such as teachers and entrepreneurs. Developing countries need to be involved in international assessments (i.e. PISA, CES, ALL).

b. Governance and Management

Presentations were made by Josef C. Gorgels, Head of the Southern Africa Initiative of German Business (SAFRI), South Africa; Uwe Haug, Head of International Affairs, Steinbeis Foundation, Germany; and Trevor Riordan, Manager Skills Development, International Labor Organization (ILO) and discussion followed.

Mr. Gorgels described a model private/public partnership in Southern Africa (SA) to promote business and entrepreneurship, which is supported by DaimlerChrysler Corporation, and is directly involved in a human resource development project to make SA small and medium scale businesses more competitive.

Phase one is a ‘two day MBA’. Phase two refines and expands the reach of initial training. Phase three focuses on training the trainer programs and individual follow-up with entrepreneurs to help ensure sustainability.

The results are substantial, with more than 500 entrepreneurs involved. He noted that the private sector will invest in education where it sees the need. But cooperation between the public and private sector is difficult. The private sector must be flexible and quick to react to the needs of the market, whereas the public sector tends to be inflexible. There is a need to apply professional management practices in the education sector, decentralization can assist as this makes education and training more flexible and responsive to local needs.

Mr. Haug outlined the activities of the Steinbeis Foundation which is financed privately and free of subsidies, and linked to Steinbeis University Berlin. The Foundation includes a network of about 500 knowledge transfer centers characterized by a practical focus and customer orientation, operating on the principle that the institute is a business within a university with a focus on business and management programs.

Mr. Riordan stressed linkages between governance/management issues with related issues including: finance and resource allocation creating an integrated view of education and training over a person's life, new settings of learning, the need for improved methods of skills recognition and career guidance, and the need for an expanded range of partners. The need for a more integrated approach was highlighted by the contrast between the participation in formal education, which rapidly declines in early adulthood, and the increasing amount of adult and continuing education, which is primarily in non-formal settings.

This trend is reinforced by shifting demographics in some countries with aging populations, which means older and less skilled adults need access to lifelong learning. Trends in governance and management include moves to bi and tripartite Human Resource Development authorities (i.e. UK, South Africa, Mexico, Egypt, Ireland), moves toward regional and provincial institutions, industry institutions and in some cases sectoral institutions.

Several challenges were noted including reconciling the national and local interests, decentralization with accountability and quality, how to recognize and certify skills learned in the rapidly proliferating informal and non-formal sector. Key recommendations include sharing of management and investment between stakeholders with Government carrying the responsibility for basic education and high risk groups, enterprises and individuals for workplace based learning, with social dialogue and collective bargaining a key element in the process of enhancing workplace learning as a element of LLL. The ILO's work on learning and training in high performance work organizations and small/medium enterprises will culminate in a discussion of a new standard on Human Resource Development I 2003/4 (background research is summarized in the ILO report *Learning and Training for Work in the Knowledge Society*, Geneva, 2002.)

The working group addressed the following issues and made related recommendations:

**Strengthening public private partnerships**—this can be strengthened by applying cost-benefit thinking in financing education and training, there is a need to integrate shared visions of the stakeholders and further develop the concept of partnership, allow the private sector more flexibility.

**Responsibilities of Stakeholders**—Government should be responsible for overseeing strategy, with contributions from the private sector, there is a need for a clear definition of the stakeholder responsibilities, and the type of contribution by stakeholders will vary depending on the level of economic development.

**Arrangements to coordinate between national and local stakeholders**—the sharing of national tax resources would promote stakeholder initiatives. There is a need to monitor and benchmark to create common understanding and highlight best practices and use competition as an incentive for better performance. There is a need to clearly identify roles of local entities in national strategies and enable the flow of information.

c. Financing Lifelong Learning

Presenters were Abrar Hasan, OECD, and Marina Larionova, Higher School for Economics, Russia.

In the knowledge economy, LLL implies higher spending on education and training throughout a person's life. The challenge is to find new resources, make expenditures more efficient, and increase the benefits of learning. For adult learners, education investments will result in marginal returns—given the high opportunity costs and relatively short working career later in life—unless the benefits of learning can be increased or the costs of education and training are defrayed.

The key options for finding new sources of finance, according to Mr. Hasan, were outlined in the World Bank's LLL draft manuscript, which contains a number of such options. Increasing the efficiency of spending can be attained by changing the way resources are allocated. Ms. Larionova outlined the Russian proposal for using demand-side financing in higher education, whereby spending would be associated with secondary school leavers' scores on national examinations and the resources would follow the student to the institution of their choice. The most difficult challenge would be to increase the benefits of learning, especially for adult learners.

While Mr. Hasan's presentation was based on the OECD experience, it nevertheless agrees with the need for a combination of new and old financing mechanisms, consistent with the World Bank's LLL paper, and tailored to local needs in developing and transition countries.

Marina Larionova's presentation on higher education in Russia, while restricted to tertiary education, nevertheless represents an innovative way to finance higher education which would allocate resources based on secondary school achievement, and money would then follow students through the institutions they choose to attend.

Many of the questions and recommendations raised during the discussion period concerned specific issues in lower-income, developing countries

- **Principles for allocating resources to formal and non-formal learning**— all learners should be able to acquire basic competencies, and delivery of free primary education should be the responsibility of the public sector. Pre-primary education should also be considered. The Government should facilitate dialogue between the labor market and beneficiaries, and learning and earning should be linked. The structure of the learning system should ensure effectiveness and cost effectiveness.
- **Role of public and private financing for youth and adult, formal and non-formal training**— all partners should contribute and criteria should be set up for cost sharing. The degree of contribution should be in line with the benefits reaped. There is a particular role for governments in setting up the infrastructure for lifelong learning and providing incentives for other partners to invest.
- **Efficiency and new resources**—Governments should provide incentives to educational institutions and enterprises to provide efficient services, while maintaining quality. Budgetary allocation should be aligned with outcomes and performance. The potential for ICT should be fully exploited.

d. Opening Pathways, Articulation Between Learning Systems

Presentations were made by Tony Davies, New Zealand Qualifications Authority, and Hermann-Günter Hesse, German Institute for International Educational Research.

The approach in New Zealand was described by Mr. Davies. There are a multitude of bodies looking at qualifications system—a Ministry-led Education Review Office (within schools), Crown Entities (New Zealand Qualifications Authority, (NZQA), Tertiary Education Commission, Career Services).

In the field of quality assurance, Vice Chancellors are responsible for quality control in universities, and while NZQA is responsible for other quality control, it delegates this responsibility to associations for public polytechnics and colleges for education. An recent attempt to overcome this blockage has been to merge Skill NZ with the Tertiary Education Commission which will provide accreditation for all tertiary institutions and funding. In New Zealand, access to tertiary sector for disadvantaged populations is threatened by financing, despite recent expansion of the system. Difference between funding for formal and non-formal students privileges formal education.

Recognition of informal learning is significantly underdeveloped, stemming from historical patterns, but also from the different nature of informal learning (for example, ad hoc rather than planned and highly contextual rather than abstract). In response to this, the New Zealand National Qualifications Framework recognizes skills, knowledge and understanding outside formal education and training. It is standards-based and has ten levels. The credit assessment involves investigating what the learners know. There are mechanisms for assessing

prior learning (for example, industry training organizations do this for on-the-job training and workplace learning).

New Zealand is developing a Register of Quality Assured Qualifications to increase transparency for students and general public; facilitate transfer of credit; identify quality-assured qualifications; and assist in the international recognition of New Zealand's qualifications. So far, 16,000 national unit standards have been registered. However, these formal credit arrangements have yet to be recognized by universities. Individuals maintain a Record of Learning which tracks all credits wherever they are gained.

Mr. Hesse drew a distinction between two types of skills: basic skills such as reading, writing, mathematics, foreign language; and key competencies, such as self-regulated learning, tolerance for ambiguity; creative thinking, ability to work in a team; and learning how to learn.

Basic skills need to be meaningful and are best acquired through student centered learning, *but* that it was possible to teach these skills through more traditional approaches.

However, the key competencies cannot be learnt through traditional, teacher-centered methodologies. Unfortunately our understanding of the appropriate teaching methods is not complete. We can say that learning should be based on specific knowledge and acquired in principle and rules-oriented ways and where the learner is active. The learning should also interact in learning teams, and where the learning situation is variable, in different domains; tasks require flexible adaptations to unfamiliar situation and learning is productive (results can be evaluated by the learner).

Mr. Hesse also argued that a balance needs to be struck between learning and achievement. Achievement is the demonstration of what someone can do and in doing this the aim is to try to avoid mistakes. Learning, on the other hand, is acquiring knowledge about new phenomena, and so mistakes are welcome.

Culture is a key factor in explaining student performance and can help students to overcome poor teaching or learning environments. For example, Mr Hesse conducted a study comparing the performance of students in Hanoi, Vietnam, with those in Munich, Germany, on the PISA assessment. Those in Hanoi performed better.

This is explained, he said, by their very high motivation to learn. A challenge in changing the learning process, however, is that there may be a disconnect between the culture inherent in a learning institution and that of the local environment. This may result in cultural conflict and prevent new learning methods. For example, students with inquiring minds may be perceived as challenging authority.

The following conclusions and suggestions were made by the working group:

- **Constraints to learner mobility between learning systems.** These include institutional infrastructure, past legacy, and funding. There is a lack of vertical and

horizontal coherence within and between systems and a lack of transparency of pathways between formal and non-formal systems. There is insufficient basic foundation skills, and socio-economic status can create hurdles to learning.

- **Incentives to overcome constraints to LLL.** There is a need to recognize prior/non-formal learning, and optimize vertical and horizontal integration within learning systems. This can be facilitated by national qualifications frameworks but this requires the buy-in of the private sector. Intrinsic motivation to participate in LLL needs to be improved, and individual learner accounts in one technique.
- **Institutions that most effective in facilitating access to learning.** These include new E-learning and distance-learning techniques. Formal institutions can become more flexible, and community public private partnerships can promote access.

e. Equity and Access

The key presenter, Adama Ouane (Director UNESCO Institute of Education) opened by stressing that, while learning for the knowledge society represents boundless potential opportunities for education systems world wide, to date these opportunities remain unfulfilled in developing countries.

He stressed that life long learning (LLL) should now be a necessary principle to guide education policy-makers everywhere. However, there is a risk that LLL could remain the prerogative of a developed society. Already there is a tendency to narrow down the potential applications of LLL. Key assertions were:

- LLL has to be for all: should embrace a built-in element of initial and general education and should permeate educational systems horizontally and vertically.
- Creative ‘thinkers and doers’ are needed more than skilled employers.
- There is a danger of greater gaps between countries where there is an emphasis on the knowledge society and on LLL, and those poorer societies that have not yet focused on these issues are at risk of being left even further behind.
- There is a need for strategies to be developed so that LLL can be accommodated within the goals of EFA.

Key questions were raised in the discussion period. In general the group agreed that the cost of doing nothing could outweigh the cost of provision of LLL; that such learning could be a powerful tool for social inclusion (but needs to be tailored and culturally specific); that LLL is shared social responsibility; that quality must be emphasized in LLL provision; and that diversity and variety of learning materials are important.

More specifically:

- **Early childhood education:** Strong interventions from participants stating that the importance of early childhood education was not recognized sufficiently either in the

plenary presentations or in this working group. LLL is broader than the conference proceedings had implied. There had been insufficient recognition of how children learn and how, if learning starts at an early age, many difficulties can be eliminated.

- **Costs of LLL:** There was a long and unresolved discussion about the costs of LLL and the need for countries to prioritize their investments in education. Given that some countries cannot afford or achieve universal primary school enrollments, what is a sensible policy for the introduction of and financing of LLL?. With scarce budget resources in many developing countries, who should pay for LLL?. What should happen after basic education in those poorer countries? Who should be providing LLL opportunities? What is the role of the Government? What is the role of the individual?
- **Priorities and affordability:** A key issue, which participants came back to several times, is that of priorities. If the public budgets can only afford to finance primary education perhaps this is more important than investing in other components of lifelong learning. Participants agreed that they were worried about affordability and about who pays after primary education, but that any discussion on LLL should not concentrate on economic issues only. There was broad agreement that it is necessary to take into account the costs and risks of a country doing nothing about LLL.
- **Second chance education:** LLL needs to be structured to ensure opportunities for second-chance education, education for drop-outs, and expanded chance learning for youth and adults. It was felt that flexible learning opportunities and qualifications frameworks would offer a second chance to drop-outs and would benefit by being directly linked to the job market. The group agreed that LLL should be tailored to specific labor market needs and should be relevant to different levels of the population, as well as relating to the culture of the country. There was agreement that LLL policies should take account of the need to motivate and offer incentives to different levels of the population.

f. Knowledge-Driven Development and Knowledge Generation

Presentations were made by Carl Dahlman, Manager, Knowledge for Development Program, World Bank; Lan Xue , Executive Associate Dean, School of Public Management and Executive Vice President, Development Research Academy for 21<sup>st</sup> Century, Tsinghua University, China; and Kemal Gürüz, President, Higher Education Council of Turkey.

The three panelists broadly addressed three main questions: (a) what are knowledge-based economies? (b) what are the challenges that these economies face in relation to tertiary and higher education systems? and (c) what demands do LLL requirements place on tertiary and higher education systems? Essentially, the panelists adopted Dahlman and Anderson's definition of knowledge-based economies being those that are able to effectively create, access, adapt, and apply knowledge to spur economic and social development.

The role of ICT in reducing transport and communication costs across 'worlds' and especially in reducing the cost of accessing and diffusing knowledge, were well noted. The panelists also noted that depending on the responses of tertiary and higher education systems, advancements in ICT may pose a threat or an opportunity. It is up to the systems to strategically position themselves to take up ICT opportunities.

The central role of universities in knowledge creation was underscored. Because universities and research institutions play a central role in processes associated with knowledge-based economies (i.e. the knowledge creation, accessing, adaptation, diffusion and application), challenges associated with knowledge-based economies will necessarily affect tertiary and higher education institutions. (These challenges are outlined below.)

It was noted that lifelong learning is an imperative for effective transitions into knowledge-based economies and for effective participation in the global economy. Lifelong learning was broadly viewed as the need for continuous / sustained learning. It was viewed as the constant retooling and renewal of skills and knowledge required for effective participation in the ever-changing macroeconomic and labor market contexts. Again the role of ICT in promoting LLC was noted. Challenges that LLL pose for tertiary and higher education systems were discussed and outlined below.

- **Responding to LLL demand:** This could mean offering shorter, more focused courses that reduce the opportunity cost of long drawn-out, broad-based university courses, especially for a lifelong adult learner. Institutions also need to offer professional courses that are responsive to labor market demands. The option of mounting 'just-in-case' education and training programs is 'past due,' as even universities recognize the need for 'just-in-time' education and training programs which were mostly associated with vocational training institutions.
- **The need to expand access to tertiary and higher education:** It was noted that virtually all countries making effective transitions to knowledge-based economies have substantially increased access to tertiary and higher education. One of the presenters suggested that a tertiary and higher education gross enrolment ratio of 40% seems to produce the required threshold of personnel that can effectively manage a knowledge-based economy.
- **The need to attain and maintain high quality, relevant education:** It was suggested that a key part of staying relevant lies in applying knowledge that is able to adapt to new contexts. Sustained relevance also requires the bridging of the gap between knowledge and markets. Responsiveness to the general economy and the labor market was therefore critical. Universities and other tertiary education institutions need to provide relevant knowledge services such as technical advice and research.
- **Affordability:** In the process of expanding access and improving quality, institutions are also challenged to make tertiary and higher education affordable to the state as well as to people. In this regard, the institutions were challenged to be more entrepreneurial in their financing sources and modalities. Among other suggestions were instituting reasonable student contributions to their education through tuition; loans; more private sector

involvement in the financing of tertiary and higher education; and entrepreneurial staff activities were cited as ways of reducing the financial burden of higher education on the state.

- **Restructuring tertiary education:** The combined challenge to be accessible, and provide high quality, relevant, and affordable education, generally calls for the restructuring of higher and tertiary institutions (universities especially). Key elements of such restructuring would entail the constitution of smaller, specialized, more agile and efficient institutions (instead of the regular comprehensive large, inefficient and unwieldy institutions). This may require mergers; the creation of learning 'conglomerates'; and the creation of centers of excellence with very specific and high quality programs.' Staying current and relevant may also require the decentralization of the governance of higher education institutions as well as the involvement of 'lay governance'.
- **Creating and diffusion of knowledge:** Knowledge-based economies also require higher and tertiary education institutions to be more effective in the creation, adaptation, and use of knowledge. Beyond that, institutions ought to play a critical advocacy role for others to use knowledge more effectively. It was well recognized that among others, knowledge-based economies, need to put in place, incentives for the private sector and the general public to effectively use knowledge. Institutions also need to develop and sustain high quality Research and Development programs. It was noted that most countries under-invest in R&D and that tertiary and higher education institutions often suffer this under-investment the most.
- **Use of Information Communications Technology (ICT):** The most significant challenge posed by ICT is that they are fast 'globalizing' two key functions of higher and tertiary education institutions, notably, the provision of higher education and the creation of knowledge. Institutions therefore no longer have the monopoly of their national markets. Students from anywhere in the world can register with the 'super-star universities' via the internet and ignore their local institutions if they do not meet their needs. Equally, globally produced knowledge is now accessible at the click of a keyboard. A key challenge of tertiary and higher education institutions, especially those in developing countries, therefore is to globally compete for students or stand a real risk of being ignored, especially by students at the higher end of the spectrum. The institutions also need to effectively integrate themselves into the global knowledge production enclaves.



#### 4. THE ROAD FORWARD – INTERNATIONAL DEVELOPMENT

Louis Steven Obeegadoo, Minister of Education and Scientific Research, Mauritius, summarized developing country concerns. He stated that lifelong learning is a novel concept, reflecting the growing importance of the knowledge economy and the new demands of the labor market, and requires a changed mindset and culture of openness to permanent learning. Developing countries are indeed aware of the challenges and opportunities ahead and pointed to actions being taken by countries (specifically in the Southern African Development Community – SADC - region) in primary, secondary and tertiary education policy, literacy, technological training, etc. SADC has established a national qualifications framework legislature for compulsory education through secondary (age 14); Mauritius, for example, has a „cyber task force“ which defines computer literacy targets for the various segments of the population, and a new school IT project which is setting up appropriate ICT infrastructure in schools including the procurement of hardware and software.

Difficulties facing these countries were noted, such as falling student enrollment ratios in the SADC region since 1995 despite increased spending on education, due to war, famine and AIDS. EFA is far from a reality in most of these countries. Financing is a major constraint. It is difficult to bring the private sector in when there is no original market for training. Motivation is also a problem—how to bring adults back into the education system when there are no immediate returns ?

Minister Obeegadoo concluded by calling for a renewed North-South partnership to promote LLL and bridge the knowledge gap. Peace, understanding and respect for others is bred through education. Without an international solidarity effort, the gap between countries and within countries will only get wider, threatening world peace. Lifelong learning for all should be about entering the age of knowledge as a one world community.

Giving the private sector perspective, Mr. Jürgen Mohilo, Member of the Board of Management, DaimlerChrysler Services AG, Germany, spoke of DaimlerChrysler's strong commitment to lifelong learning and training for its employees. Recognizing that employees are required to update their skills continuously to remain employable, DaimlerChrysler allocates about EUR 1,000 per employee per year for education and training and each employee spends approximately four days per year in continuing education. Operating in 37 countries worldwide, DaimlerChrysler also recognizes its corporate social responsibility in these countries which includes learning and education.

Mr. Mohilo described DaimlerChrysler's projects in South Africa and South America where they have worked with the community and national education institutions to establish technical education centers which supplement existing programs by teaching basic computer literacy, specialized technical skills, modern production skills, management and business know-how. Mr. Mohilo concluded that the private sector has an extremely important role to play in

imparting knowledge. Global companies must learn to deal with a variety of cultures and approaches to learning. Their experience is invaluable in working with governments, scientists and teachers to ensure developing country access to information.

Ms. Annette Dixon, Human Development Sector Director, Europe and Central Asia, World Bank spoke of the necessity to align education systems with the needs of knowledge societies, both in terms of marketplace and wider social values, to sustain economic growth, build social cohesion and peace. Changes include a need to nurture competencies for the knowledge society such as: the need to expand early childhood, secondary, tertiary and non-formal education to build the foundation skills for LLL, and the need to focus on equity outcomes across social groups.

Ms. Dixon noted the new relationship between learners and teachers in the knowledge economy as education becomes more learner-centered, with individuals managing their own learning and teachers becoming facilitators of learning. Teachers must develop their own skills for the knowledge economy, including digital competence. Ms. Dixon also discussed the new financing arrangements for LLL—innovative arrangements such as loans, vouchers, partnerships, tax incentives, learning accounts—as well as the need to strengthen linkages between the labor market, education outcomes and financing arrangements, and to target financing to achieve equity goals.

In conclusion, Ms. Dixon recalled two main messages from the conference: (i) EFA and LLL are now at the center of the development agenda, and it is clear that access to basic education is not enough; and (ii) a worldwide education movement needs to be developed to ensure that all countries and all social groups can participate and benefit from global market outcomes.

Ms. Uschi Eid, State Secretary of Germany's Federal Ministry for Economic Cooperation and Development, looked at how *development cooperation* can respond to the challenges and make use of the opportunities of the knowledge society. Universal primary education, the foundation for any advanced development of competence, has received fresh momentum from recent World Bank and G8 initiatives which must be maintained consistently in the coming months and years. But development cooperation must also help developing countries pursue broad sector-wide approaches (SWAP) to education including primary, higher and lifelong education, and to strengthen the link between education and other development priorities in the context of a government's Poverty Reduction Strategy (PRSP). Ms. Eid also emphasized the role development cooperation must play in helping developing countries create the broadest possible and widest access to education programs at all levels, in particular girls and women. Ms. Eid also considers the transfer of knowledge *between* developing countries to be an essential aspect of the global knowledge society and suggested targeted support towards establishing knowledge networks within the scope of South-South cooperation.

In conclusion, Ms. Eid noted that support for education has been a priority area of Germany's development cooperation for a long time. In 2000, education accounted for 19 percent of Germany's total bilateral official development assistance, a large portion of which

supported higher education. She stated that BMZ has declared its intention to expand support for education as a priority area of German development cooperation, in particular to increase support over the next five years for primary education as the foundation of LLL.

Finally, a conference participant provided an insightful summary of the Conference as follows:

- *The conference reaffirmed the need to locate education and training within the larger framework for overall national and global development.* „Although we know that education and training are key facilitators of development, it is not often that educators stop to reflect hard enough on whether they are aligning their strategies for the development of education and training systems with overall macroeconomic and labor market demands. Perhaps in our fear of repeating the mistakes of old-fashioned ‘manpower planning’ we have gone too far as to become a bit irrelevant. The conference reaffirmed that education and training are for a purpose. For that purpose to be realized, we should reflect long and hard on whether we are doing the right education and training, in the right manner and for appropriate purposes.“
- *Second, the conference reaffirmed the old progressive education philosophy that ‘education is living’ and not ‘preparation for life’.* „In the old school of thought, we could go to school to prepare for a future life and once we enter that life, stop learning and apply what we once learnt even when shifting contexts render it obsolete. Lifelong learning is not new, but it needs to be brought back to the forefront of our thinking about ‘education as living’ or better still ‘learning as living.’ “
- *Third, the conference rightly re-emphasized the canons of good education and pedagogy* (learner-centered, applicable, responsive, contextually relevant, competency-based, etc). „Again, the old blend of progressivism and pragmatism. A skeptic could call it ‘old wine in new bottles’ and indeed some speakers so noted. But the old wine needs to be poured back into new bottles if that’s what will make it attractive. The only caution is not to concentrate too much on polishing the bottle until it sparkles anew, but to rather focus on why the old wine keeps being served.“
- *Fourth, further work is needed.* „For the short conference that it was, while the overall goal and the specific objectives were addressed with the exception of the third specific objective (identify issues for further research, discuss an agenda for action, and define the next steps), there is a need to revisit this objective so we would be forced to come up with concrete and ‘implementable’ interventions.“







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