

**International Symposium on Lifelong Learning
for Poverty Alleviation and Sustainable Development:
Developing a Research Agenda for the Asia-Pacific**

**Hong Kong Institute of Education
12 - 13 January, 2011**

*Organised by the Hong Kong Institute of Education, in association with
UNESCO (Paris, Bangkok and Beijing),
the Asian Development Bank (Manila),
InWEnt (Capacity Building International, Germany)
and the Colombo Plan Staff College for Technician Education (Manila)*

General Information for Attendees

Symposium Materials

The Symposium Agenda has been uploaded onto the Symposium website <www.ied.edu.hk/isll>. To facilitate discussion, we have also prepared a Background Concept paper (**Appendix A**) for your reference.

Please visit the Symposium website from time to time for latest information about programme, list of participants, transport arrangements, etc.

Submission of Paper for Publication

All attendees are not required to submit a paper for presentation during the Symposium. However, the Symposium welcomes attendees to submit papers on topics closely related to the theme and sub-themes of the Symposium. These papers will be considered for inclusion in a special issue of an international journal (currently under negotiation) and for an edited volume on the topic of the Symposium being prepared for the international publisher Routledge. Interested parties are requested to observe the requirements stipulated in the “Guidelines for Submission of Full Paper” (**Appendix B**).

Official Hotel

The Symposium has reserved a room for each non-local participant at the following hotel, for the three nights on 11, 12 and 13 January 2011.

Hyatt Regency Hong Kong, Sha Tin

Address: 18 Chak Cheung Street, Sha Tin, Hong Kong

Tel: +852 3723 1234

Fax: +852 3723 1235

Email: hongkong.shatin@hyatt.com

Website: www.hongkong.shatin.hyatt.com

Extension of Stay

For those who wish to extend their stay beyond the three nights provided, please contact the Symposium Secretary (via email: isll@ied.edu.hk) as early as possible. You will enjoy the corporate discount rate only if reservation is made through the Symposium.

Travel Information

Visa requirement: Please check whether you require a visa to enter Hong Kong for your nationality, prior to travel and in sufficient time to process your visa application. Please note that Hong Kong and China visas are NOT the same. Should you require a further letter from us to enable you to get a visa, kindly let us know soonest and we will arrange.

Language: Cantonese is the local language. Putonghua and English are also used. Road signs and most public transport information are in Chinese and English. Hotels and most restaurants have menus in English.

Currency: The Hong Kong dollar (HK\$) is pegged at approximately HK\$7.8 to US\$1. RMB (the currency used in Mainland China) is accepted in some shops. *Octopus Cards* (pre-stored value cards for the public transport system) can be also be used in convenience stores, supermarkets, and the canteens at the Symposium location. The card can be obtained at any railway station. It carries a HK\$50 deposit, and can be returned prior to departure for a refund.

Weather: In Hong Kong January is usually cool. Expect the temperature to be between 10-15°C, and up to 20°C on a sunny day. It is usually dry, but there can be light rain. Note that the Symposium venue is air-conditioned. It is suggested that participants bring appropriate clothing such as a coat or sweater.

Electricity: The supply is AC220-240V. Plug sockets are of the UK type, with 3 pins. See http://en.wikipedia.org/wiki/BS_1363 for a picture.

WiFi: HKIED has a wireless network, we will advise on access on arrival. You may bring your own portable computer, and a few notebook computers will also be available in the meeting area for participants to check their email messages during breaks in the Symposium.

Contact Numbers: Emergency services can be contacted on 999. In case of a non-emergency situation, such as being lost or requiring medical attention, the following number will be available for use during the Symposium, on a 24 hours basis: Call Benjamin 9474 8459 and he will be able to follow up on your request for assistance.

Transportation within Hong Kong

On Arrival and Departure

The Symposium will arrange for ground transportation between Hong Kong Airport and the official Hotel. Please provide us with your flight schedule when it is available, and we will contact you a few days before the Symposium to finalize transport arrangements.

On Symposium Days

The Symposium will provide a free shuttle service between the Hotel and the Symposium venue, on 12 and 13 January. The bus departure time and location will be announced later through the Symposium website.

General

Please visit the Symposium website for more information about public transport in Hong Kong. The Symposium Secretary will assist with any specific questions.

Social Gathering

Welcome Reception

The Symposium organizers invite all participants to a Welcome Drink at the official Hotel.

Date/Time: 11 January 2011 (Tuesday), 6:00 – 7:00 pm

Venue: Tin Tin Bar, Hyatt Regency Hong Kong, Sha Tin

Official Dinner

The Symposium will host a Symposium Banquet, evening of 12 January. It is expected to be a casual occasion for participants to mingle, and get to know each other better. This will definitely be an unforgettable evening for participants to experience and discover the uniqueness of Hong Kong. Details will be announced later.

News and Enquiries

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Background Concept Paper:

LIFELONG LEARNING FOR POVERTY ALLEVIATION AND SUSTAINABLE DEVELOPMENT¹

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Abstract

In the light of the global challenges facing us, lifelong learning has emerged as one of the keys to improving the quality of life in the 21st century. It is no longer sufficient to have a sound initial education: one must continue to acquire new knowledge and skills to benefit from the new opportunities that advances in science and technology bring, and to cope with the difficulties of life in world of change. The evidence confirms that investing in learning pays off for both individuals and nations, in terms of income, employment, productivity, health and other benefits. Moreover, providing opportunities to learn throughout life turns out to be a crucial factor in the struggle to eradicate poverty and to educate for sustainable development. But adopting the principle of lifelong learning does demand a new vision, one that shifts the emphasis from education to learning; one that moves to a more seamless and user-friendly system; one that recognizes the diversity of ways in which knowledge and skills can be acquired in the information age outside of the formal system. In particular, if progress is to be made in reducing poverty and ensuring development is sustainable, governments and the international community will need to meet their commitments and take the steps needed to make lifelong learning for all a reality.

¹ The authors wish to acknowledge the assistance of Kenneth King, Mark Mason, Bob Adamson, LEE Moo Sung, Eric Tsang, Peter Kell and Maureen Tam who reviewed and made helpful comments on earlier drafts of this paper. However, the authors take full responsibility for the final version of the paper.

Introduction

Lifelong learning is not new: indeed it is a distinctive characteristic of our species. All humans have a remarkable capacity to learn throughout their lives. Our complex nervous system gives us distinct advantages such as the ability to learn, to think, to create, to develop tools, and to store, process and pass on knowledge. In time, we began to formalise the learning process by establishing schools, colleges and universities to promote the types of learning deemed to be important at key “stages” of the life cycle. As the pace of change accelerated, governments, education providers, employers and community organizations developed adult and continuing education, non-formal and professional development programmes to equip workers and professionals with new knowledge and skills, or to provide a second chance for those with no formal education or whose education failed to meet their basic learning needs.

From its first days, UNESCO has fought for the right to all to education as a pre-requisite to democratisation and full development. One of its major concerns has been, and continues to be, fighting for the right to education of all whose basic learning needs have not been met. Hence the importance it attaches to the concept of learning throughout life, and the emphasis given to adult and continuing education, literacy and inclusiveness. For example, long ago UNESCO (1962) recommended that Member States:

regard the various forms of out-of-school and adult education as an integral part of any education system so that all men and women, throughout their lives, may have opportunities for pursuing education conducive to their individual advancement and their active participation in civil life and the social and economic development of their country.

The idea of lifelong learning became a central theme in UNESCO’s work with the publication of *Learning to Be* (UNESCO, 1972). The Report argued that lifelong learning needs to be the keystone or organizing principle for education policies, and that the creation of the learning society should become a key strategy for facilitating learning throughout life for individuals and societies.

Learning: the Treasure Within, the Delors Report (1996), built on these two ideas, enlarging them in the light of the challenges facing individuals and the global community in the 21st century. For the Delors Commission, lifelong learning implies the acquisition of knowledge, skills and values throughout life, a continuous process of learning to know, to do, to live together and to be (the “four pillars” of education):

The concept of learning throughout life thus emerges as one of the keys to the twenty-first century. It goes beyond the traditional distinction between initial and continuing education. It meets the challenges posed by a rapidly changing world. It is not a new insight, since previous reports on education have emphasised the need for people to return to education in order to deal with new situations in their personal and working lives. That need is still felt and is becoming stronger. The only way of satisfying it is for each individual to learn how to learn.

In recent years, UNESCO, OECD and other international organizations have replaced the terms ‘lifelong education’ and ‘recurrent education’ with the term ‘lifelong learning,’ and this

is now virtually universally accepted as the preferred term. As such, the term shifts the focus from education to learning, from just attending school or college during formal education to *learning how to continue to learn throughout the life cycle*.

Defining lifelong learning

In embracing all forms of learning from “cradle to grave”, lifelong learning (LL) is sometimes referred to as being ‘life-long and life-wide’. The notion of LL includes:

- all stages and types of education and training (early childhood, primary, secondary, tertiary, adult and continuing, recurrent, TVET, parent education etc.)
- all the ways in which we acquire skills and values, process, store and use information and experiences that lead to sustained changes in cognition, attitudes and behaviour (imitation, teaching, lectures, textbooks, on-the-job training, work experience, apprenticeships, open and distance learning, e-learning, web, television, newspapers, libraries, museums etc. etc.)
- all types of learning, education and training. (European Commission, 2000; Tuijnman & Bostrom, 2002).

The definition used by the European Union (2000) is typical and one of the most widely accepted definitions among researchers and policy makers: lifelong learning is defined as:

all purposeful learning activity undertaken throughout life with the aim of improving knowledge, skills and competencies within a personal, civic, social and/or employment-related perspective.

To this could perhaps be added the notion of ‘accidental learning’ throughout life.

Generally, learning is classified into three types: formal, non-formal learning and informal.

Formal learning means learning usually undertaken consciously, which is organised in instructive institutional settings, such as schools and other educational institutions, and often leads to formal qualifications.

Non-formal learning is also deliberate and often highly organised, but learning also occurs outside schools and colleges of the formal education system - in-house training in the workplace, the literacy and adult education programmes for out-of-school youth and adults. This kind of learning usually provides learning opportunities for a particular group of learners, and accentuates the acquisition of skills and expertise. Although it may not lead to any formal qualification, the skills that learners have acquired during the training may still be recognised or even accredited as prior learning or work experience. Nowadays, prior learning and work experience are greatly valued. Besides possessing a recognised formal qualification, many job advertisements clearly state that having work experience in a particular field is a prerequisite for applying for a particular position.

Informal learning is not bound by time and space, and this is what distinguishes it from other forms of learning. In other words, learning occurs anywhere and anytime, and it is not necessarily organised and undertaken consciously. Informal learning refers to the accumulation of knowledge, skills, attitudes and insights from daily experience and exposure to the environment, whether it be at home, at work, at play, from the example and attitudes of

family and friends, from travel, reading newspapers and books, viewing films or television or surfing on the net. Given the unique features of informal learning, people may not realise they were actually learning until they reflect on what they have done or experienced. As such, the ability to reflect is essential in informal learning.

The notions of formal, non-formal and informal learning not only demonstrate the vertical dimension of learning (learning throughout life) but also its horizontal dimension (life-wide learning). Life-wide learning helps to facilitate learners to acquire and integrate various sets of knowledge and skills in order to apprehend, advance or even invent new knowledge and skills (Ouane, 2009).

Lifelong learning has become something of an umbrella term. As a slogan, it has contributed to considerable confusion and debate about its meaning and implications for research, policy and practice. As a principle, lifelong learning has rarely been given the prominence it merits: we need to close the gaps between the rhetoric of lifelong learning and what happens in practice.

While the focus in lifelong learning is generally on the individual, one of the characteristics of successful organizations and communities is their capacity to continue to learn. Not only do they encourage research and innovation, they make optimal use of the diversity of ways in which their members share knowledge, skills and ideas to improve productivity and to ensure that development is sustainable and equitable. Thus we can speak of a “learning society,” “learning cities”, “learning regions”, “learning organizations” and “cultural development.” Conversely, nations, cultures and organizations that fail to continue to learn “throughout life” are at risk of extinction in the global knowledge economy and in the face of global warming.

Why is lifelong learning important?

(a) LL = a basic human right = full development = empowerment

The Hamburg Declaration (UNESCO, 1997) argues the case for a new vision of education and training in which learning becomes truly lifelong on the grounds that it benefits individuals and the society. Lifelong learning is important because it helps to: develop the autonomy and sense of responsibility of people and communities, to reinforce the capacity to deal with the transformations taking place in the economy, in culture and in society as a whole, and to promote coexistence, tolerance and the informed and creative participation of citizens in their communities, in short to enable people and communities to take control of their destiny and society to face the challenges ahead.

For individual learners, a commitment to lifelong learning brings with it the long unfilled promise of education as a basic human right as well as a wide range of both economic and social benefits. The principle that all, regardless of age, gender, ethnicity or circumstances, have the right to have their learning needs throughout the life cycle met is enshrined in the 1948 Universal Declaration of Human Rights. UNESCO continues to insist that education is a basic human right. It is about the full development of the human personality, about human dignity, empowerment and freedom.

For Freire (1975), the process of learning to read and write is necessarily accompanied by the learner’s increasing consciousness of his or her existential situation and the possibility of changing it, a process he called “conscientization” but which today is more likely to be called

“empowerment.” Under the EFA umbrella, the focus is on the knowledge and life skills required for daily life, but we need to remember that these include those necessary to generate a passion for continuing to learn throughout life, “conscientization” and empowerment. All too often, the formal system ends up killing the passion to continue to learn among those most “at risk” and is more about conformity than empowerment. Adding the perspective of lifelong learning, this means that all, young or old, rich or poor, have the right to have their basic learning needs met, and to be given opportunities to continue to learn throughout their lives to improve the quality of their own lives as well as that of the society in which they live.

Acceptance of the principle of lifelong learning by governments, corporations and communities means that individuals can expect to be supported in their efforts to acquire and update the latest knowledge and skills that are essential to their daily and work lives, whenever and wherever they need them. This not only facilitates the personal development of learners, but also enhances their employability, social mobility and capacity to be effective in participating in activities designed to improve the quality of life in the community. Moreover, individual learners are entitled to customise their learning trajectories in order to meet their unique learning needs. This not only helps learners to better understand themselves, but also others. Meeting and exchanging ideas with people who are from a diverse range of backgrounds, helps learners understand and respect other people’s opinions and culture, so as to prepare them to perform various roles in the family, schools, workplace and society, and be responsible and considerate citizens in the society and in the world at large. In doing so social cohesion is fostered (Woodhall, 1997; Brown, 2001).

In Hong Kong, for instance, the government is committed to the development of a lifelong learning ladder. In this regard, ‘a key development was the establishment in 2004 of the Qualifications Framework to provide learners with a clear articulation ladder to foster a vibrant, flexible and responsive environment that would promote lifelong learning’ (UGC, 2010, p 47.)

(b) LL = better employment prospects + higher income

For the most part, the research (as set out below) has focused on the rates of return (RoR) to individuals and society from formal education and training, as reflected in higher qualifications. Because lifelong learning covers all education, both formal and non-formal, and also covers training, it can be argued that we need to undertake research on how different levels and types of learning contribute to poverty alleviation and sustainable development (Maclean and Wilson, 2009). We shall look in a moment at how this case is made for the different traditional levels. For instance, RoR studies do just this: taking primary, secondary and higher, and only very occasionally TVET, and investigating the added benefits to individuals and to societies of each of these.

In the knowledge economy, there can be no doubt that for the individual, continuing to learn, whether by formal or non-formal means, is the key to gaining employment and income stability. The longer one has engaged in formal education and training as reflected in one’s skills and qualifications, the higher one’s income and the more likely one is to be employed. Recent RoR studies have included both educational attainment and skill measures, while controlling for other variables such as gender, occupation, work experience and geographic location (OECD, 2005, 2008). It turns out the main reason that well educated and trained

individuals earn higher incomes is that they have higher knowledge and skill levels, that is, higher qualifications are simply a proxy for more skills (Maclean and Wilson, 2009).

The lifelong learning perspective goes beyond formal education and training to include “skills development.” The latter is used to describe the wide variety of ways in which individuals who are seeking work or who are in employment continue to learn, to acquire the skills and competencies influencing employment and earnings (Adams, 2010). To the degree that schools, higher education and TVET institutions are about facilitating the acquisition of skills required for work, they are engaged in skills development, but just as, or even more, important in preparing for work, are apprenticeships, enterprise-based training and professional development, informal learning on the job, and government and non-government training programmes.

In all countries, the overall level of unemployment appears to be related to the capacity of economies to create and sustain employment opportunities for those with low skills. For individuals with a low skills base, being given the opportunity to acquire the skills needed for employment at strategic points throughout the life is a crucial factor in improving their prospects for finding a job and a secure income, and thus combating poverty and improving the quality of life for themselves and their families.

Adams (2010) points out that the measuring and tracking the skills acquired at later stages of the lifecycle is difficult, given the variance in the competencies sought by employers, the diversity of ways in which skills and competencies are acquired, and the variations in duration, level and quality of the training being given. Certainly reliable and comparable statistics on within-industry training are difficult to find. Moreover, individuals participating in non-formal programmes do so for many reasons, ranging from the personal to the job-specific (Ouane, 2006; UNESCO, 1999). What a poor illiterate woman or a village elder regards as important is often ignored, however legitimate it may be from a human rights or cultural perspective.

The research does confirm that adults with higher levels of educational attainment are much more likely to take advantage of formal and non-formal skills development opportunities (OECD, 2008). Also, there is considerable regional variation in opportunities provided for them to participate in enterprise training. In China, nearly 90 percent of employers report training is provided, while in India the percentage drops below 20 (Adams, 2010).

Adams (2010) has recently summarized the research on the impact of skills development programmes on employment and earnings, as follows:

1. TVET is more effective when focussed on skills closely linked to market demand.
2. Where access to TVET exists and jobs are being created, the socially disadvantaged are likely to benefit.
3. Providing higher skills levels can bring benefits where an economy is producing jobs that demand those skills.
4. Special programmes providing skills and other support services have been successful in improving employment outcomes for disadvantaged youth.
5. TVET can help widen the opportunities for young women, particularly in newer occupational specializations such as IT where employment has not yet formed gender-specific patterns.

6. The involvement of employers in the design and delivery of training contributes to better outcomes for all, including the disadvantaged.
7. Formal apprenticeships can be an effective means for providing skills, but “traditional apprenticeships” of the type common in the informal sector of developing countries have not been subjected to rigorous evaluation or research.
8. Although TVET as part of secondary education offers no iron-clad guarantee as a solution to youth unemployment, it can lead to higher retention and educational attainment.

Research on the returns to adults from participating in part-time post-compulsory education is reminiscent of the adult and continuing education tradition, and it underlines a tension in making the case for lifelong learning for poverty alleviation and sustainable development. Some of the research suggests that the returns to youth and adults who continue to develop their skills can be high, and even “explosive,” especially when there is a skills shortage in the labour market (OECD, 2005. Chapter A9). However, there are large differences among countries in the number of hours individuals can expect to spend in non-formal job-related education and training over a typical working life, and such variations need to be taken into account when estimating rates of return (OECD, 2008). Moreover, the bulk of the research has been undertaken in developed countries: we simply do not have anywhere near enough research on the benefits of lifelong learning in poor countries to know how much and what forms of education and training make the difference.

Addressing the learning needs of all young people and adults is a key EFA goal, one that must be met if the MDG goal of eradicating poverty is to be achievable. It concerns literacy, numeracy and the generic (e.g. problem-solving, team work, life skills) and more context-specific skills (e.g. livelihood, health, marketing) and vocational skills that are usually acquired in more formal settings. In developing countries, field studies of non-formal education and literacy programmes run by community-based organizations suggest that programmes that respond to the expressed needs of the poor contribute directly to the alleviation of poverty, particularly those that are closely linked to income-generating activities and if they provide training in entrepreneurship and practical knowledge of science and technology (Ouane, 2007; UNESCO, 1997; Mahbub ul Huq, 1997; Sachs, 2005).

In developed countries, intensive literacy training yields an income return averaging around 13 percent for out-of-school youth and older adults, but in USA it has been as high as 34 percent. Conversely, there is a considerable loss in earnings associated with a lack of language and quantitative proficiency among migrants, indigenous peoples and school drop-outs (OECD, 1997; Bloom et al. 1997). Moreover, education and skills levels are strongly related to a person’s employability and productivity. Persons who have higher language and quantitative skills are not only more likely to find work, to earn more and to be more productive, they are also less vulnerable to long-term unemployment (OECD, 2005).

The evidence suggests in many countries, governments and formal education institutions give little attention to the unmet learning needs of disadvantaged and vulnerable young people who are not in school – their needs are generally left to NGOs (Muhbab ul Huq, 1997; UNESCO, 2010). Many initiatives exist to reach youth and adults who are poor through non-formal vocational skills training, but they are often locally based, short-lived, under-funded and not part of a comprehensive national strategy for the alleviation of poverty and for sustainable development.

Reviews of skills development suggest that countries can begin to design national skills development strategies only if there is adequate information on the learning needs in disadvantaged communities, programme providers, course content, duration and cost-effectiveness (IIZ-DVV, 2004; UNESCO, 2010). Locating the most vulnerable groups and involving them in the design and delivery of non-formal programmes is another challenge, especially in large and culturally diverse countries with large disparities between richer and poorer areas. What is lacking as well is research on the extent of poverty and the structural reasons for its persistence, despite economic growth. More research is needed to explain the variations in the estimates of the private and public benefits of lifelong learning, even more important is the need to undertake studies that illuminate our understanding of the conditions under which investing in learning throughout life contributes to the alleviation of poverty and to sustainable development not only in wealthy countries but in poor countries and communities.

(c) LL = Social benefits (productivity, GDP, social capital)

While there is a fairly sizable body of research on the benefits of education for the individual, much remains to be done to clarify the benefits to society stemming from investing in various forms of learning and education throughout the life span. At the national and international level, policy-makers generally see the promotion of policies of lifelong learning as a high priority in education, labour and economic policy because they are convinced that additional formal and non-formal education and training generate many economic and social benefits, such as increases in employment rates and productivity, economic growth, global competitiveness and the international reputation of the state or country concerned. The research certainly suggests that human capital is the key driver of economic development: countries investing most in developing their human capital are those enjoying the most rapid and sustained economic growth and the highest quality of life (Deutsche Bank, 2008).

The social benefits of education and training are usually measured in terms of “social internal rates of return”, that is, as the sum of the private and public benefits. Given the limitations of the national data and international indicators being used, estimates are available only for a handful of countries. The analyses undertaken by OECD suggest that the social returns from completing upper secondary education in the Netherlands, Sweden and the USA all exceed 20 percent. The social internal returns associated with returning to education or training at age 40 in part-time studies seem to be more variable: in some countries, high and others low, near zero in Denmark and Finland and about 16 percent in Italy and the USA. The estimated long-term effect on economic output of one additional year of education or training in OECD countries generally falls between 3 and 6 percent (OECD, 2005). The nations achieving the most rapid and sustained economic growth are those investing the most in developing human capital by investing heavily in facilitating learning throughout the lifespan. Learning throughout life leads to improved human capital and labour productivity, and this in turn is the major contributor to economic development (Banks, 2008).

To be successful in the global knowledge economy, public and private organizations and industries need information-age workers. Knowledge is growing at an exponential rate. New ideas, innovations and technologies constantly reshape almost every aspect of our daily lives, and particularly the world of work. Thus employers need managers and employees who are creative problem-solvers, innovators who are constantly updating their knowledge and expertise, reflecting on what can be done to improve productivity, seeking to be at the cutting edge of knowledge in their field, and are good team players. Expecting employees to be

active lifelong learners and aspiring to be a learning organization demands that the provision of high quality training for employees and opportunities for them to engage in collaborative research and development programmes, rather than trying to compete through low cost production with low levels of skills. Successful organizations take the notion of lifelong learning for their employees and the organization seriously (Ordonez and Maclean, 2006).

As a general rule, the payoffs from investment in basic skills training for the masses are highest in low-income agricultural economies and those still in the early stages of industrial development (UNESCO, 1997). It also seems that investing on lifelong learning for all raises the productivity of the whole workforce, and also contributes to a lowering of fertility and infant mortality rates, and to increases in social capital (UNESCO, 1997, 2000; OECD, 2005).

The existing RoR research is of limited salience to our principal concern: lifelong learning. From a lifespan perspective, there needs to be shift from the focus on formal levels, GDP and incomes, to learning across the lifespan, poverty alleviation and sustainable development. As Stiglitz (2002), Sachs (2005) and others have shown the obsession with economic growth and rates of return does not necessarily translate into poverty alleviation and sustainable development: in reality, growth often means that the rich get richer and the poor get poorer, and even greater exploitation of natural resources. Pro-poor growth and equitable growth are needed if poverty is to be reduced and if development is to be sustainable

(d) LL and poverty alleviation

The wider social benefits of education in terms of poverty alleviation have been set out in the literature since the early 1980s. For developing countries, the case is almost always made in terms of formal education, and specifically primary education, and there is ample evidence that provided primary schooling is inclusive, of a good quality and the focus in teaching is on learning, completion of primary education contributes to productivity and thus to the alleviation of poverty (Power, 2007; UNESCO, 2101). For girls, basic education (particularly if it extends to the secondary level) translates into lower birthrates and lower mortality rates (Klasen, 2002; Jha, 2009; Sachs, 2005; Power, 2007).

What evidence there is on female literacy suggests that continuing to develop skills and learning about the *Facts for Life* (UNICEF, UNESCO & WHO, 1992) also pays off in terms of improved health, nutrition and family stability. Literate, educated women have fewer and healthier children and better health themselves than those with little or no education. Moreover, the higher the education and skill level of the mother, the more likely it is that her children will stay on to complete their formal education and perform well (Power, 2007; UNESCO, 2010). In all countries, women with higher levels of knowledge and life skills are much better able to manage their lives and support their children in a changing economic, social and cultural environment, than if those with little or no education. What is most impressive as well is the sense of confidence and empowerment of neo-literate girls and women that develops as they master the knowledge and skills they need.

Many education and development policies are based on the assumption that literacy and primary education play a key role in poverty reduction, while higher education is crucial for economic development in the global knowledge society. While both are true, the evidence is also mounting that all levels of education and types of training (formal and non-formal) can contribute to both, that is, learning throughout life is the “master key” to sustainable

development and poverty alleviation. For example, recent analyses of Indian and cross-national data indicate that higher education not only contributes to economic development in India, but it also makes a significant contribution to the reduction in absolute as well as relative poverty, and particularly to increasing life expectancy and reducing infant mortality (Tilak, 2007). When higher education institutions use their expertise to work with schools serving poor communities and act as their advocates, progress can be made in combating poverty, raising the basic skill levels of both children and adults, improving crop yield and improving health and nutrition (Airini, McNaughton, Langley, & Sauni, 2007; Power, 2007).

The key issue, however, is whether it is that exposure to initial formal education that makes a difference, or whether it is **continuing** to develop skills and learning about the *Facts for Life* which “pays off.” One suspects that both are important: the optimal situation seems to be the basic learning needs of all, boys and girls, are met. On reaching puberty, it important that girls in poor communities stay on at school, and out-of-school girls and mothers are given the opportunity to continue to learn in non-formal, literacy and skills based-programmes (e.g. *Facts for Life, 1992*). The circumstantial evidence suggests this is probably true – but we need more detailed studies to determine the key factors necessary in different contexts.

(e) *LL as the “master key” for MDGs*

For most international organizations, the policy of providing additional learning opportunities throughout life is viewed as “the master-key” that opens the doors to poverty alleviation, greater social justice, equity, peace building and sustainable development (Ordonez and Maclean, 2006). It is also accepted that lifelong learning is a necessary condition for achieving the goals of education for all, education for sustainable development, poverty alleviation and other Millennium Development Goals (MDGs). Providing relevant and high quality learning opportunities, whenever and however is appropriate, is critically important for all children, youth and adults, male and female, rich or poor, urban or rural, and particularly for those most in need (the poor, disabled, indigenous peoples, refugees and displaced persons, immigrants, long-term unemployed, street children, nomadic peoples etc.).

Nations with low levels of investment in education and training tend to have low levels of school life expectancy and wide skills gaps. They are very much in danger of falling even further behind in terms of human and economic development, and are the countries least likely to meet their Millennium Development Goals (UNDP, 2009). On the other hand, the Asian developing countries that have invested heavily in meeting the learning needs of both children and adults have made, for the most part, remarkable social progress in achieving their key MDG targets (UNDP, 2009; Power, 2007, 2009).

Moreover, all children and adults will constantly need to update their understanding of how the environment is changing and its implications for how we will need to act in the future as the planet warms, and new scientific evidence on the impact of human activity comes to light. The MDGs relating to climate change and carbon emission will not be achieved in the absence of effective ESD in formal schools, higher education and TVET programmes, **and non-formal programmes** that reach out-of-school youth and adults, young and old, rich and poor.

In short, we have argued that in the 21st century, empowering individuals with the knowledge and skills that they need throughout life is both a basic human right and is vitally important for the well-being of individuals, organizations and nations. What evidence we do have on

the importance of learning throughout life comes mainly from studies of the benefits of to the individual and society of investments in successive stages of formal education, and to a lesser extent from formal TVET and work-related skills development. From the perspective of lifelong learning, it is the **additionality**, the learning outside the formal system, the learning over and above initial formal education and training, that counts in a world of constant change and increasing complexity. When it comes to poverty alleviation and education for sustainable development, what evidence there is suggests that **both a sound formal education and this additionality are needed.**

Issues in addressing poverty alleviation and sustainable development.

If we wish maximize the contribution that lifelong learning can make to the alleviation of poverty and sustainable development, we need to understand why progress toward these two goals has been slow. UNDP (2009) highlights some of the major obstacles:

progress towards the goals is now threatened by sluggish – or even negative-economic growth, diminished resources, fewer trade opportunities for the developing countries, and possible reductions in aid flows from donor countries. Today, more than ever, the commitment to building the global partnership embodied in the Millennium Declaration must guide our collective efforts...we know that the goals are achievable with global political support, strong partnerships and co-ordinated efforts...we also know that if some trends persist, some of the goals will be very difficult to reach.

Poverty

If we are to address the issue of poverty, we need to understand what it means. Definitions of poverty are a case in point. In the 1960s, poverty was defined in terms of income (less than \$1 per day). In the 1980s, poverty began to be defined in terms of deprivation, needs and vulnerability. And in the 1990s, UNDP introduced the Human Development Index. Mahbub ul Huq (1997) added what he called the Human Deprivation Index, arguing that far more crippling than income poverty is the poverty of basic human capabilities.

We also need to remember that what it means to be poor and the measures that need to be taken to address poverty issues depend very much on the context. Thus Poverty Reduction Strategies (PRSs) for helping the poor in rural areas tend to focus on providing financial help to buy fertilizer, improve education, health and sanitation in villages; in the slums of Mumbai, the PRSs were more about empowerment, about building the capacity to negotiate with the city government (Sachs, 2005). Grameen Bank micro-credit programmes in Bangladesh and elsewhere tackle both income poverty (through loans) and capacity poverty (through education and training). In essence, the more effective PRSs are sensitive to the facets of poverty that are dominant in a given context; they engage the poor being targeted at all stages of the development and implementation of the programme; they adopt a multi-sectoral approach; and they generate new strategies for leveraging resources (Power, 2007, 2010).

Poor families are concentrated in nations and communities caught in what Sachs (2005) calls the “poverty trap.” The key problem is that when poverty is extreme, the poor do not have the ability to get out of the trap by themselves. In particular, girls and women in most poor parts of the world are locked into a cycle of poverty and early marriages, with illiterate mothers

bring up illiterate daughters who are married off early into yet another cycle of poverty, illiteracy, high fertility and early mortality. Breaking this cycle requires more than educational interventions: it demands a comprehensive development programme that transforms the basic conditions of rural and slum community life. Learning throughout life, and especially literacy, needs to be part of this transformation (UNESCO-UIE, 2010), but providing other basic infrastructure elements (water wells, fuel supply, health clinics, roads etc.) are also necessary, not to speak of micro-credit, improved employment and income-earning opportunities (Power, 2007).

Sustainable development

The major issue facing the world today is that of learning how to live and work in ways that are sustainable, so that the reasonable needs of people from all walks of life and in all countries can be satisfied, without so over-exploiting the natural resources upon which all life depends that the ability of future generations to meet their needs is threatened (UNESCO-UNEVOC, 2004).

The concept of sustainable development has its origins in what has proved to be the shaky marriage between those who are deeply worried about the environmental impact of human activities and those whose for whom development remains the driving force behind policy and action. Beginning in the 1960s, environmentalism became an important political and intellectual movement in the West, one that led to the establishment of environmental education courses, environmental law and protection agencies. In 1972, the UN Conference on the Human Environment focussed attention on the need for international agreements and action. UNEP was established, and a joint UNESCO-UNEP programme facilitated the development of environmental education.

The Brundtland Report (1988) insisted that to assure our common future, development must be sustainable, not only from the ecological, also from social, economic and cultural points of view. Thereafter, the term “sustainable development” became popular. But the concept of sustainable development continues to evolve as research and modelling of the impact of human activities highlight new risks and our understanding of the issues to be addressed deepens.

The threats stemming from global warming and climate change have been brought into sharp focus by the 1992 UN Conference on Environment and Development, the Kyoto Protocol, Al Gore’s advocacy (*An Inconvenient Truth*), Stern Review, the Intergovernmental Panel on Climate Change, and the UN Decade of Education for Sustainable Development (2005-2014).

The effects of global warming are showing up with increasing intensity: destruction of forests and species habitats, acidification of oceans, loss of wetlands, bleaching of coral reefs, rapid and continued loss of biodiversity, to name a few. The human ecological footprint has tripled since 1961: the earth’s resources are being used at a rate at least 25 percent higher than the planet’s ability to regenerate. As climate changes accelerates, hundreds of millions of people are likely to be deprived from access to water, and millions more will be displaced as sea levels rise, floods and droughts become more prevalent and crops fail. In some parts of the world, it is predicted that will be sharp rises in death toll from climate-induced diseases (Commonwealth Foundation, 2007).

The scientific community has warned that even if the current Kyoto targets are met, global temperature will rise at least by a few degrees with the attendant devastating consequences for vulnerable communities. Some governments are beginning to take a few tentative steps, but most are reluctant to take the tough measures required now to cut carbon emissions and to achieve their Millennium Development Goal targets and commitments. Moreover, at the launch of the UN Decade for Education for Sustainable Development, UNESCO argued that the principles of sustainable development must find themselves in children's schooling, higher education, non-formal education and community based-learning activities if sustainable development is to become a concrete reality for all of us in our daily decisions and actions. Education for sustainable development generally is seen as relating to three areas of sustainable development:

Society: an understanding of social institutions and their role in change and development, as well as the participatory systems for democracy, the protection of fundamental rights and freedoms, and the resolution of conflicts.

Environment: an awareness of the fragility of the natural environment and the affects of human activity, with a commitment to factoring in environmental concerns in social and economic policy.

Economy: a sensitivity to the limits of economic growth and its impact on society and on the environment, with a commitment to assess personal and societal levels of consumption out of a concern for the environment and for social justice.

Learning how to live and work in ways that are sustainable includes, but necessarily goes beyond, formal programs for education for sustainable development (ESD): the principles of sustainable development need to be installed in all levels and to cover all types of education, training and learning (Fien, Maclean and Park, 2009). Particular attention needs to be given to pre-and in-service teacher education, an area in which UNESCO has been active (UNESCO, 2002). A number of countries have taken steps to develop policies and some ESD programmes are operating for schools, Technical and Further Education (TAFE) Colleges and higher education institutions (e.g. Australian National Commission for UNESCO, 2005), but progress has been slow and erratic.

Both national international studies are needed to assess the outcomes of the explicit attempt to install SD into formal and non-formal education. Moreover, from a lifelong learning perspective, ESD needs to be a key part of the effort to raise public understanding and awareness of such issues as the relationship between carbon emissions and global warming and biodiversity, leading to significant shifts in community attitudes and behaviour. In this non-formal, adult and continuing education, within-industry training, research and innovation directed at finding affordable and renewable sources of energy and other concerns form part of a lifelong learning agenda, one that involves the media, web-based learning and networking, and public awareness campaigns.

The challenge to nations, industry and communities is to take decisive and urgent action of key issues relating to sustainable development. Acting on SD is not a mere question of ESD, it is, rather, an issue of political will, or the lack thereof. And it is also a question of justice in governance: where there are privileged minorities in leadership positions, there is no urgency to legislate for poverty alleviation or indeed for sustainable development. It is not a question of education coverage or of ESD, but simply that 'governance matters'. As Sen (2007) and

Power (2010) have noted, the major issues to be faced in meeting the MDGs are “unaffordability” and the lack of “political will.” To these, Adams (2010) adds the need for reforms in governance, finance reforms, market and school reforms.

The reality is that within nations, rich and poor, the privileged minorities, the rich and powerful are in no hurry to surrender their princely lifestyles and extravagant levels of consumption for the sake of the poor or in the case of sustainable development. Corruption, exploitation of the masses, tax avoidance schemes, and the economic and trade policies their lobbyists and think tanks have pushed represent obstacles to the achievement of the MDGs.

As a result, the governments of most poor nations simply cannot afford to meet the education, health, sanitation and other basic needs of all. They lack both the resources and the political will to deal with the ecological and human havoc created climate change. Sadly, governments in most wealthy countries predominantly act in what they see to be the “national interest,” generally narrowly defined in terms of short-term political and economic goals deemed to maintain their power base. Building political will require a shift in political and economic priorities of all countries, one that embraces both the global and national interest, one based on the ethics of caring about well being of others and the planet, as well as the nation’s economic, social and environmental well being.

Governments are likely to act only if there are strong pressures within and from the international community to do so. One of the key tasks of the re-engineering of education systems being called for is that of empowering all, but especially marginalised groups, with the knowledge, skills and confidence to join the struggle to create a better world, a global community committed to ensuring development is sustainable and the rights of all to health, education, justice and security are respected (Campbell, Baikaloff & Power, 2006).

It will be “people power” that forces governments to introduce the tough measures needed to reduce greenhouse emissions, to eradicate poverty and to provide quality education for all. But to generate that power, all young people and adults (including politicians, the media and corporate leaders) need to understand what it means to be poor, why poverty persists, and how global warming will affect them and their families. Moreover, throughout their lives they will need to learn and how to learn, updating and extending their knowledge and skills so as to better cope with change, generating the capacity and confidence to participate in the struggle to build a better world. Building “people power” by educating all for sustainable development is one of the major challenges facing governments in the re-engineering of formal, non-formal and informal systems for learning throughout life.

The challenge of lifelong learning

Speaking of the shape of things to come, Power (1995) predicted that:

The widespread concern that formal education systems currently in place are not equipping young people to meet the challenges of the 21st century will, painfully and over time, lead to the development of a new educational paradigm: one that will be increasingly centred on enabling people to become lifelong learners and less on formal instruction in primary, secondary and higher education. The manner by which this will come about is by no means certain. It will not, I suspect, mean the end of schooling, but its transformation. Schooling, for example, will become less subject-oriented and more method related. Its ultimate goals will be to enable students to learn

how to learn. The educational lock-step by which students move from subject to subject and from level to level will be greatly loosened. ...The role of the teacher will also change from that of being a provider of knowledge to that of becoming a guide to the world of learning.

A **sound basic education** is necessary to provide the foundation for lifelong learning. But however good initial education and training programmes may be, they can never equip learners with all the knowledge, skills and values needed to cope with life in a changing and complex world. Within the emergence of the knowledge society, traditional distinctions between initial education and further education are becoming increasingly blurred. Moreover, the old push model of teaching does not match the pull orientation of many young people today. Increasingly, they are using the new information technologies and the media to obtain the information they want when they want it, and to share their experiences and ideas. But they do need help if they are to make sense of what they are learning informally.

Most national education and training systems have yet to take full advantage of the opportunities to promote learning throughout life created by the **new communication technologies**, and most struggle to deal with the threats its very openness creates. There are problems given the nature and extent of the “digital divide,” the lack of access and cost of web-based learning, but as costs drop and access to television and ultimately to IT spreads, more and more learning throughout the life span will become a real possibility. Reaching the unreached with the help of IT has been a major focus in the work of the Commonwealth of Learning, and was an issue given prominence by the Second World Forum on Lifelong Learning held recently in Shanghai.

The need for **governance reform** is obvious, given the diversity of government Ministries (education, labour, youth and sports, agriculture, health, industry etc.), government and non-government education and training institutions, employer and voluntary organizations, media and community groups involved in one way or another in facilitating (or in some cases, given the silo-mentality, impeding) lifelong learning. Clearly, there is a need for coherent, comprehensive, inclusive national policies within a lifelong and life-wide learning perspective (UNESCO-UIE, 2010).

Good governance also facilitates the implementation of lifelong learning policy in ways that are effective, transparent, accountable and equitable. Moreover, good governance generates and maintains mechanisms for engaging all public, private and voluntary partners in the development and implementation of programmes within the lifelong learning framework. It seeks to integrate all the resources and approaches to financing education, training and skills learning, and shifts the emphasis in control from the supply to the demand side, and from inputs to the learning needs being met and the results being achieved. Both the providers (including employers) and consumers of services that facilitating learning need to have information so as to better tailor programmes to match the skills required by the labour market and those deemed to be important by the individuals and groups (especially the poor and marginalised) being targeted.

Re-engineering education and training

A few tentative steps have been taken by providers of formal education in a few countries to:

1. ensure that learning as one moves from one level to the next is **seamless**.

2. improve the **articulation** between levels and types of education and training.
3. revise their **qualification frameworks, accreditation, quality assurance, indicator and assessment systems, and establish equivalency frameworks** to better recognize TVET, adult and continuing education, within-industry training, apprenticeships and non-formal programmes.
4. make more **effective use of IT** and open learning systems to reach the unreached and to support on-the-job training.
5. increase the **funding** and provide other incentives in support of non-formal education and training (i.e. adult and continuing education, NGO and industry-based training) while maintaining (and if necessary also increasing) support for formal education to achieve national and international goals (e.g. EFA, MDGs, ESD).
6. develop an **integrated policy framework** to drive the reform of the entire formal and non-formal education and training system, its component parts and the pathways between them.

Such steps are important elements in confronting the challenge posed by lifelong learning so that they are consistent with the principles of lifelong learning. In the end, what is needed is to use the principles of lifelong learning as the framework for re-engineering the entire education-training-adult learning system.

Adopting a lifespan perspective takes us back to the issue of the **learning needs** to be met at each **stage of human development**, and the changing priorities of the individual and the communities (local, national and global) in which they live, and in particular those that assume importance in addressing issues of poverty and sustainable development.

Lifelong learning: a developmental perspective

From a lifelong learning perspective, providing a good beginning for development during the *early years of life* is of crucial importance. The emerging research field known as “foetal origins” suggests that the nine months of gestation may constitute one of the most consequential stages in human development. Poor pre-natal conditions sow the seeds of many ailments that afflict adults and society, such as learning disabilities, heart disease, obesity, diabetes, schizophrenia and depression (Murphy-Paul, 2010). To survive, a species and its young need a life-sustaining environment: clean air, safe water, food, shelter and security. But beyond that, there are other basic needs to be met. Parents and other adults in the world of the young child must play the key role in facilitating learning, the acquisition of the internal resources of trust, confidence, autonomy, independence, initiative and connectedness that children (and our species) need for development to be life-long and sustainable (Campbell, Baikaloff & Power, 2006).

The expansion of *early childhood care and development* activities, including family and community interventions, especially for poor, disadvantaged and disabled children has been an integral part of the EFA agenda for the past twenty years. The evidence confirms that the important contribution that quality ECCD makes to cognitive and social development for children from all backgrounds, but particularly for the poor and the least advantaged (UNESCO, 2010). It also needs to be borne in mind that the foundation providing a broad basis for societal progress is “laid in early childhood education” and “there is a need for change across the entire education (and training) spectrum ranging from before kindergarten all the way to lifelong learning” (Deutsche Bank Research, 2008 p.19).

The principle of lifelong learning also implies a renewed effort needs to be made to provide formal and non-formal learning opportunities for *women during the child-bearing period*, and especially in poor communities where more than 50 percent of women give birth with no antenatal care (UNESCO, 2010). They need to understand, and to develop the confidence to fight for, what needs to be done to provide an optimal developmental environment for the foetus and young child.

The developmental tasks for children of *primary school* age seem at first glance to be fairly straightforward, at least so far as formal education and non-formal learning programmes for out-of-school children are concerned. Obviously, one needs to get the foundations for subsequent learning and development right. In practice this boils down in primary schools to a focus on basic learning needs, bearing in mind that the learning needs and life circumstances of children do vary, and that some children will need much more support and help than others. Basic education must be inclusive, easily accessible, and its quality and relevance such that the basic learning needs of all children regardless of their circumstances are met. Sadly, according to latest estimates, there are about 116 million child labourers and about 72 million children out-of-school. Millions more drop out early – over thirty percent of 17-22 years in developing countries are marginalised because of “education poverty,” i.e. they have less than four years of education (UNESCO, 2010). In re-engineering primary education systems and non-formal programmes for out-of-school children, it is important to understand the obstacles and difficulties to be faced in achieving the goals of EFA and UPE, Universal Primary Education (Power, 2007, 2010).

Clearly mastery of a language, communication, computational and social skills are crucial for the survival and well-being of children in most societies, but what is less readily agreed is what priority is to be given to other areas. A key challenge facing primary schools is to determine what is important now, what can be left to other stages in the learning cycle, and how best to involve parents and the local community and to make effective use of their resources to supporting learning. Another is the need to give more attention to developing a passion for learning, a passion often killed during schooling, a passion critical for lifelong learning.

With the onset of *puberty*, the scope and nature of the developmental tasks facing the young people assume a somewhat different character. While basic education, whatever its duration or form, should aim to meet the common needs of the population as a whole, **secondary education**, the “crossroads of life” should be “the time when the most varied talents are revealed and flourish” (UNESCO, 1996). Meeting the basic learning needs of adolescents is of particular importance in facilitating the transition from childhood to adult life.

As secondary education for all becomes a reality, it becomes increasingly difficult to meet the learning needs of all young people attending a high school. Preparing young people for higher education can no longer be the primary purpose of secondary schooling, and thus the emphasis shifts to preparation for adult life, and particularly for the world of work: hence the increasing “vocationalisation” of secondary education (Lauglo and Maclean, 2005). Nonetheless, a significant number of young people leave early, but all too often they lack the knowledge and skills demanded by employers and end up neither in education nor the workforce. The balance between public and private education and training remains a challenge. In many countries, the quality of education one receives is dependent on the ability to pay: quality private education is expensive and accessible only to the wealthy, while the schools serving disadvantaged communities and the masses suffer from the lack of resources.

The major challenges facing secondary education have been set out in the Delors Report (1996) and in Asia-Pacific Educational Research Association (APERA) publications (Hughes, 2006). It is generally agreed that there is a need for “a fundamental rethinking of the role and place of secondary education within a lifelong learning framework. An important part of this rethinking has been the efforts made to assist secondary schools in the Asia-Pacific region to play their role in achieving the goals of education for sustainable development (Fien, Yencken & Sykes, 2002; Maclean, 2007). Similarly, the Asia-Pacific Centre of Education for International Understanding (APCEIU) and the Asia-Pacific Network for International Education and Values Education (APNIEVE) have played an important role in promoting education for international and intercultural understanding, but much remains to be done at all levels of education to ensure that the majority of young people understand the poverty in developing nations and within their own society and what they can do to help the poor at home and abroad.

The re-engineering of education and training systems is required if we are to meet the challenges facing us in the 21st century. It must also extend to the reform of the two other components of the formal system – technical and vocational education and training (TVET) and higher education.

Reorienting TVET for sustainable development and poverty alleviation has been a significant part of the agenda of the UNESCO. The central theme of the Second International Conference on Technical and Vocational Education was *Lifelong learning and training – a bridge to the future*. Developing this theme, it has been working hard at the task of moving TVET from the narrow task of providing training for industry and occupation specific skills to the broader task of workforce development and lifelong learning for sustainable development. The Bonn Declaration (UNESCO-UNEVOC, 2004) affirmed that skills development leading to age-appropriate TVET should be integral to education at all levels. It also stresses that it can be no longer regarded as optional or marginal, and for a renewed effort to modernize TVET and to ensure its enhanced status and sustainability, giving particular priority to TVET initiatives that alleviate poverty and human-centred sustainable development. In seeking to reach the unreached, more support need to be given to the work being done by TVET colleges to develop open systems of learning using the new technologies as well as more traditional modes of distance education (Maclean, 2005; Ordonez and Maclean, 2006; Fien, Maclean and Park, 2009; Maclean and Fien, 2010).

Similarly, UNESCO World Conferences on Higher Education in 1998 and 2009 called for the **re-orientation of higher education** in the light of the challenges facing us in the 21st century, and at the same time a reaffirmation of its commitment to the core values and functions of higher education, in particular insisting that its mission must be to:

contribute to sustainable development and improvement of society as a whole which should be preserved, reinforced and further expanded, namely to:

- 1) *educate highly qualified graduates and responsible citizens able to meet the needs of all sectors of society...*
- 2) *provide opportunities for higher learning and learners throughout life...*

- 3) *advance, create and disseminate knowledge through research and provide, as part of its service to the community, relevant expertise to assist societies in cultural, social and economic development...*” (UNESCO, 1998).

The prospects for building a better world are a function of the extent to which tertiary education institutions play an active and effective role in national and international efforts to achieve the MDGs. Through their research and teaching they can help policy makers and those working at the coal face to better understand what needs to be done to alleviate poverty and to promote sustainable development. It will be the professional expertise and commitment to service of their staff and graduates that will help make the difference: commitment that leads to advocacy, and expertise that adds value to Poverty Reduction Strategies and hands-on assistance in efforts to improve education, health, sanitation, water, food supply and productivity in the slums, streets and villages where the poor live.

It is in our higher education institutions that the educators of the future are trained and those already in the workforce need to have their knowledge and skills base constantly upgraded (Karmel and Maclean, 2007). Moreover, they play (or should play) a significant role, given their research and expertise, in the dialogue and action needed to move from the existing fragmented and at times dysfunctional formal system of education to one that takes the principles of lifelong learning seriously and re-engineers education and training (including and especially teacher education) in ways that contribute to the alleviation of poverty and sustainable development. Moreover, higher education institutions do need to engage with poor communities and their partners in development in developing the types of lifelong learning policies and programmes that make the difference in tackling the economic, educational, social and environmental problems facing them, and monitoring their effectiveness.

In our view, one of the keys to the alleviation of poverty rests with providing lifelong learning opportunities for *girls and women*, the most fundamental of which is literacy (Power, 2007, 2010). We need to empower girls and women with the knowledge and skills they need to make fertility choices, instead of having these choices made solely by their husbands or family. They need to acquire the knowledge and skills that allow them to more easily join the labour force and/or to contribute to increasing productivity in the village, to space childbirth, and improve the health and nutrition of their children (Jha, 2009). Countries that are making progress in eradicating poverty have low fertility rates and their economic growth now exceeds population growth. Their girls stay at school at least until they are 15 or 16, most of their women are now literate, and they have made significant progress towards closing gender gaps (Klasen, 2002; UNESCO 1995)

The contribution of *non-formal learning* and the re-engineering of *adult and continuing education* is unquestionably one of the greatest challenges in the quest to ensure all have the opportunity to learn throughout life and to ensure that development is sustainable (Maclean and Singh, 2005). Literacy, seen as meeting basic learning needs, remains a major task in the struggle to alleviate poverty: 759 million adults lack literacy skills today. It is one of the most important tasks undertaken by adult educators, voluntary organizations and Technical and Further Education (TAFE) colleges. Moreover, successful companies and organizations invest significant amounts in non-formal and in-house training and programmes for their employees, and investment that pays off in terms of improved productivity and efficiency, and for the organization in ensuring its own development is sustainable. Moreover, a number

of development countries do recognize the importance of the role played by adult and continuing education in combating functional illiteracy in the workforce and immigrant groups. In the knowledge society, the increasing involvement of employers and community groups in recurrent and adult learning programmes is opening up new pathways and opportunities, but recognition of that learning by formal education institutions is rarely given (Karmel and Maclean, 2007).

Bhola (2004) argues that the poor and powerless are capable of discontent, but they are not always able to be effective in the demand for social justice: they need help from selfless teachers and activists. In the present context, he argues, adult educators seem to be the best hope for the world's poor, but warns that we need to think of poverty alleviation for sustainable development as a problem of "operational system design," that is, adult and non-formal educators must work towards a system of education and training that interfaces with the totality of the existing system of politics, economy, the labour market and formal education that fulfils the income and lifelong learning needs of politicians, corporate and community leaders, bureaucrats, workers, parents and educators.

In the development of the EFA agenda, UNESCO had to fight hard to ensure that the concept of basic education for all did include literacy, the development of basic skills provided by adult education and most TVET programmes in schools and colleges. The battle continues: in the MDGs EFA is reduced to universal primary education, and in almost every country. Basic formal education for children, important as it is, by itself is not enough. It can and must play an important role in the alleviation of poverty and education for sustainable development. But it cannot meet the basic learning needs of all throughout life. Sadly, the dedication and enormous contribution being made by voluntary organizations and non-government organizations tend to be ignored by education authorities and, at best, given token support by governments - the investment in adult learning in most countries is less than 1 percent of GNP (UNESCO-UIE, 2010). From a lifelong learning perspective, non-formal, adult and continuing education must feature as a significant part of an integrated system, and be given the recognition and support they need in the struggle to alleviate poverty and to ensure that development is sustainable.

In many countries, *informal learning* via the media and the net have assumed an ever more significant role in shaping the knowledge-base and values of the masses, at times playing a constructive and enriching role, but too often falling short of its potential to facilitate learning throughout life, and even at times contributing to the destruction of small cultures and the creation of a culture of consumerism, violence and prejudice. How to enlist the media and how to help all, young and old, to use the net wisely and as part of lifelong education has become a major challenge.

DESIRABLE FUTURE DIRECTIONS

To achieve the goals of lifelong learning for poverty alleviation and sustainable development, it is suggested that *the governments of the Member States of the UN*:

1. Establish a Lifelong Learning Task Force or Commission responsible for making recommendations to government on policies, strategies and changes that need to be made in order to promote a culture of lifelong learning, to set national targets and to develop and implement integrated action plans and strategies for poverty reduction and sustainable development.

2. On the basis of the recommendations made by the Task Force, develop a coherent policy and set of strategies for awareness-raising and to support the re-engineering of existing systems of formal and non-formal education and involve stakeholders and the media in promoting lifelong learning for poverty alleviation and education for sustainable development.
3. Request all authorities within the public and private sectors of the education and training to undertake a review of the extent to which existing policies and practices is consistent with the principles of lifelong learning, to submit their findings to the Task Force, and work with it to identify priorities for action.
4. Provide much greater support for non-government and voluntary organizations active in providing non-formal education and training and to enable them to better assess and report on the contribution that their organization is making to the creation of opportunities to continue to learn throughout life for all, and particularly those whose needs have not, or not being adequately met by the formal system,
5. Request employer and community groups and other stakeholder groups to identify skills gaps in the labour market and unmet learning needs of disadvantaged groups in the communities in which they work, giving special attention to the poor and to education for sustainable development for all.
6. Provide the Task Force with the funds and authority to commission reviews of the research and to undertake additional studies to assess the effectiveness of education and training programmes for children, youth and adults for poverty alleviation and sustainable development, and to examine issues of articulation within and between sectors, recognition of non-formal education and training, and the reorientation of accreditation, qualifications frameworks and quality assurance mechanisms in accordance with the principles of lifelong learning.
7. Support professional development and training programmes for key educational and training personnel to facilitate their efforts to develop strategies within the framework of lifelong learning for poverty reduction and sustainable development

Request international organizations (inter-governmental, non-government, development banks and agencies) to

1. Collaborate in the development of a coherent, integrated UN policy and action plan to provide all with opportunities for learning throughout life for poverty reduction and education for sustainable development, reinforcing and extending their collective and individual efforts to support programmes and activities aimed at achieving the MDGs by 2015.
2. Generate a shared international agenda, agreed targets and strategic plan of action, and joint agreements on roles, responsibilities and funding.
3. Expand international statistics and develop more robust and policy relevant indicator systems to assess progress in promoting lifelong learning, the effectiveness of international and national policies and strategies aimed at poverty reduction and sustainable development

policies and strategies, and the social, economic and environmental benefits from investments made.

4. Build partnerships with and seek the support of international corporations, media, foundations and non-government organizations, involving them actively at all stages in the development and implementation of lifelong learning policy and strategies.

5. Support international, comparative and developmental research on the effectiveness of LL policy and programmes for poverty alleviation and sustainable development.

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International Symposium on Lifelong Learning 2011 Guidelines for Submission of Full Paper

The Symposium welcomes attendees to submit papers on topics closely related to the theme and sub-themes of the Symposium. The paper will be considered for inclusion in a special issue of an international journal (currently under negotiation) on the topic of the Symposium, and for an edited volume being prepared for the international publisher Routledge.

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(2) Language and length

The manuscript should be written in English, in approximately 6,000 words.

(3) Format and style

The manuscript should be presented in accordance with the style suggested by the Publication Manual of the American Psychological Association (5th edition), and be formatted to the following specifications:

<i>Paper:</i>	A4 Portrait (21 x 29.7cm)
<i>Margins:</i>	2.5cm at all sides
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For tables, charts, figures and images:

- should be of good quality, clearly reproducible in either B/W or color format
- each with a number, heading and source (if applicable)
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Please arrange the paper contents in the following order.

(a) Title

Please give the paper title.

- (b) Authors' information
Basic information of each author and co-author (if applicable), including name, position, affiliation and contact information.
- (c) Abstract
A 200-word abstract that summarizes the research question, approach and findings.
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At most 5 keywords should be provided below the abstract.
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Interested parties are requested to:

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