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Panel Session 2 – Lifelong Learning: meanings, challenges and opportunities

Keynote Presentation by Prof. Colin Power

**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.

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Introduction

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 (UNESCO, 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).

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 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.

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

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, 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.

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. 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.)

(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).

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. 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 individuals who are seeking work or who are in employed continue to learn, to acquire the skills and competencies influencing employment and earnings. 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.

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 suggest that effective programmes respond to the expressed needs of the poor and are closely linked to income-generating activities and provide training in entrepreneurship and practical knowledge of science and technology (UNESCO, 1997; Mahbub ul Huq, 1997; Sachs, 2005). In developed countries, 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, and they are 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)..

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

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. 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 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). 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: 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. 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 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.

(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, 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 birth-rates and lower mortality (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).

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 (Tilak, 2007). When higher education institutions use their expertise to work with 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 yields, 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.

(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). 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 formal school, higher and TVET programmes, **and non-formal programmes** that reach out-of-school youth and adults, young and old, rich and poor.

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.

Poverty

What it means to be poor and the measures that need to be taken to address poverty issues depend very much on the context. 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 by themselves to get out of the trap. 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 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. As climate change 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 there will be sharp rises in death toll from climate-induced diseases (Commonwealth Foundation, 2007). 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,

The challenge to nations, industry and communities is to take decisive and urgent action on key issues relating to sustainable development. Acting on SD is not a mere question of ESD, it is, rather, an issue of political will. 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.

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.

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, the 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. 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).

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. A key challenge facing primary schools is 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.

With the onset of *puberty*, the scope and nature of the developmental tasks facing the young people assume a somewhat different character. **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).

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. 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 should be preserved, reinforced and further expanded (UNESCO, 1998). 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 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 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 in ways that contribute to the alleviation of poverty and sustainable development.

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). 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). 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 of 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 view the contribution that their organization is making to the creation 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.

References

- Adams, A. (2010) The Role of Skills Development in Overcoming Social Disadvantage (contribution to 2012 EFA Global Monitoring Report, UNESCO, in preparation).
- Arini, McNaughton, S., Langley, J. & Sauni, P (2007) What education reform means: Lessons from teachers, research and policy working together for students success. *Educational Research for Policy and Practice*, 6(1), 31-54.
- Banks, G. (2008) Australia's Productivity Challenge and Human Capital. Presentation by the Chair of the Productivity Commission . Brisbane: Eidos Institute. August, 2008.
- Campbell, J, Baikaloff, N, & Power, C. (2006) *Towards a Global Community: Educating for Tomorrow's World*. Dordrecht, NL: Springer.
- Commonwealth Foundation (2007) *Climate Change and Its Implications*. London: Commonwealth Foundation.
- Deutsch Bank (2008). *The Broad Basis of Societal Progress*. Frankfurt: Deutsch Bank Research.
- European Commission (2000) *A Memorandum on Lifelong Learning*. Luxembourg: European Commission.
- Fien, J, Maclean, R. and Park, M. G. (Eds.) (2009), *Education for the World of Work and Sustainable Development: Opportunities and Challenges*, Springer, Netherlands
- IIZ-DVV (2004) *Adult Education and development. Vol 62*. Bonn: Institute for International Co-operation of the German Adult Education Association.
- Jha, J. (2009) Promoting gender equality within education. Paper presented at 17th CCEM, Kuala Lumpur, 2009.
- Karmel, T. and Maclean, R. (Eds.) (2007), *Technical and Vocational Education and Training in an Ageing Society*, National Centre for Vocational Education Research, Adelaide, Australia.
- Klasen, S. (2002) Does gender inequality reduce growth and development? Evidence from cross- country regressions. *World Bank Economic Review*, 16, 345-373.
- Lauglo, J and Maclean, R.(Eds,) (2005), *Vocationalisation of Secondary Education Revisited,*. Dordrecht NL: Springer
- Maclean, R. (2005) Re-orientating TVET for Sustainable Development (Special Issue), *Prospects: Quarterly Review of Comparative Education*. Vol. XXXV, No. 3, September. International Bureau of Education, Geneva.
- Maclean, R. and Wilson, D. (Eds.) (2009), *International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Training*, Springer, Netherlands.
- Maclean, R. and Singh, M. (Eds.) (2005), *Adult Learning and the Changing World of Work*, Report on a workshop held at the CONFINTEA mid-term review conference, Bangkok, Thailand, September (2003)
- Maclean, R. and Fien, J. (2010) 'Education for Sustainable Development: Lessons from the Private Sector'. In Masemann, V., Majhanovich, S. et al. (Eds.), *Clamouring for A Better World: A Tribute to David N. Wilson*. Sense Publishers, Rotterdam/Boston/Taipei
- Mahbub ul Huq (1997) *Human Development in South East Asia*. Oxford: Oxford University Press.
- OECD (2005) *Measuring the social outcomes of learning*. Paris: OECD.
- Ordonez, V. and Maclean, R. (2006) "Seeking a New Education Paradigm for Teaching and Learning to Meet the Changing Needs of Education for All and Skills Development for Work and Life: Achieving Education for Sustainable Development ". In Maclean, R. (Ed.), *Learning and Teaching for the Twenty-first Century*: Springer, the Netherlands

- Ouane, A. (2009) UNESCO's drive for lifelong learning. In Jarvis, P. (Eds). (2009). *The Routledge International Handbook of Lifelong Learning* (pp. 302 – 311). London and New York: Routledge.
- Power, C. N. (2007) Achieving Universal Primary Education and EIU. *Journal of Education for International Understanding*, 3,106-128.
- Power, C.N. (2010) Addressing the Millennium Development Goals. *Comparative Perspectives* (in press).
- Sen, A. (2007) *Civil Paths to Peace*. London: Commonwealth Secretariat.
- Tilak J.B.G. (2007) *Post-elementary Education, Poverty and Development in India*. Edinburgh: Centre of African Studies, University of Edinburgh.
- UNDP (2009) *Millennium Development Goals Report*. New York: UNDP .
- UNESCO (1972) *Learning to Be*. (The Faure Report). Paris: UNESCO.
- UNESCO (1996) *Learning: The Treasure Within*. Paris: UNESCO.
- UNESCO (1997) *Adult Learning and the Challenges of the Twenty-first Century*. Fifth International Conference on Adult Education. Hamburg: UNESCO-UIE.
- UNESCO (1998) *Higher Education in the Twenty-first Century*. Paris: (UNESCO).
- UNESCO-UNEVOC (2004) *The Bonn Declaration*. Bonn; UNESCO.
- UNESCO (2010) *Reaching the marginalised: EFA Global Monitoring Report*. Paris: UNESCO.
- UNESCO-UIE (2010) CONFINTEA VI: Sixth International Conference on Adult Education. Final report. Hamburg: UNESCO-UIE.
- UNICEF, UNESCO & WHO (1992) *Facts for Life*. NY: UNICEF.
- University Grants Commission (2010) *Aspirations for Higher Education System in Hong Kong*. Report of the Universities Grants Commission