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**Education: Unlocking the Doors to Development  
Perspectives on the Role Education Plays in Development**

**A thesis presented in partial fulfilment of the requirements for the degree of  
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## Abstract

The needs of those living in the developing world are so great that no one area of learning or development can solve all those needs. If education is going to supply some of the keys needed to unlock the doors to appropriate and sustainable development then it needs to be education that is relevant, empowering, and available to all. This sort of education will enable individuals and countries to formulate the objectives and develop the skills necessary to engage in their own development. Human beings are born with the wonderful ability to learn, to communicate, to adapt, and to develop their environment. This ability is not limited to the information that can be gathered from the immediate surroundings. Through reciting, reading, writing, and information technologies, humans learn from the past and record today's lessons for the future. Humans have the unique abilities of being able to learn co-operatively, opening each other's minds to infinite possibilities. As a species we value education so highly we list it as a basic human right. Article 26 of the Universal Declaration of Human Rights begins with the words. 'Everyone has a right to education' (Reprinted in Morsink 1999:335). It is the thesis of this paper that when everyone is allowed to exercise that right then many of the problems of the world and the doors that shut people out and deny them their basic human rights will be solved as together we learn how to live sustainably.

The year 2015 has been set as the goal for countries to achieve Education for All (EFA). Setting a goal like this generates all sorts of questions such as: How can that target be achieved? What sort of education will that be? What will be the purpose of that education? What should be taught in order to make a better, more sustainable world? How can developing countries compete against rapidly changing and expensive education systems when they can hardly afford to supply basic education, let alone food and health care to their expanding populations? It also places countries and lending agencies in the dilemma of asking what comes first, economic development and repaying debt, or educating the population?

In a short thesis, such as this, one can only hope to survey the surface of such a large topic and to point to some of the doors that the key of education can unlock in the quest for more sustainable forms of development. The thesis begins by showing that historically there has always been a strong link between education and development. The quantitative and qualitative issues associated with achieving Education for All (EFA) are then examined. The point is made that the 'banking concept of education' (Freire 1993:53) where education is seen as information that needs to be drilled into people is insufficient. Education that unlocks the doors to development needs to be education that, as Freire puts it, involves 'praxis and conscientization' (Narayan 2000:199). This sort of education places the emphasis upon the

process by empowering people to participate in their own development and trusting them to design their own solutions.

In Chapter 4 education is then placed alongside other development issues such as nutrition, health, and the environment. The relationship between each of these and education is analysed. Appropriate and relevant education is shown through the case studies as supplying some of the necessary keys so that the doors that trap people in cycles of underdevelopment can be unlocked. In the chapter on education without walls the ways alternative forms of education can be used to solve developmental problems and achieve life long learning for all is examined. Each chapter is illustrated with case studies drawn from the author's two decades of work with education in Asia and the Middle East. The conclusion of this thesis is that education does not need to be an impossible development goal on an ever-expanding list. Rather, when applied correctly, it can be part of the methodology for achieving those goals. As Dean Rusk very aptly put it, 'Education is not a luxury which can be afforded after development has occurred; it is an integral part, an inescapable and essential part, of the development process itself.' (Cited in Hanson & Brembeck 1966:28)

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## List of Abbreviations.

AUB	American University of Beirut
AusAID	Australian Agency for International Development
BD	Batchelor of Divinity
CM	Captain Mike School Milk Project
CTBS	Comprehensive Tests of Basic Skills
ECIS	European Council of International Schools
EFA	Education for All
ERO	Educational Review Office
EWLP	Experimental World Literature Programme
HCT	Human Capital Theory
ICT	Information and Communication Technology
IDT	International Development Targets
ISO	International Standards Organisation
IMF	International Monetary Fund
MSA	Middle States Association of Schools and Colleges
NCHS	National Centre for Health Statistic Standards
NZODA	New Zealand Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
OFSTED	Office for Standards in Education
SAP	Structural Adjustment Programs
TEE	Theological Education by Extension
UBS	United Biblical Seminary
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Scientific, and Cultural Organisation
UPE	Universal Primary Education

USA	United States of America
USDA	United States Department of Agriculture
WCED	World Commission on Environment and Development
WEF	World Education Forum
WWII	World War Two

## Chapter 1 Introduction

Meaningful and sustainable development increases people's choices, empowering them and giving them tools to effect their own development. Education is an integral part of personal development and can be used as a key to unlocking the doors that stop individuals and nations developing. By increasing choices good education can enable people to become the principle actors in changing and reconstructing their own reality. Education is such an integral part of human growth and development that in the Universal Declaration of Human Rights it is considered to be a basic human right along with other basic needs like shelter, security, clothing, food, water, and health care.

Education enables people to access and use knowledge for both personal and national development. Education that leads to development will be defined in terms like social responsibility, liberation, and empowerment. As Freire put it 'Liberation is a social act' (Freire and Shor 1987:109). This is just as important in the developed world as in developing countries. In New Zealand, *The Knowledge Wave Conference, Auckland August 1-3, 2001*, was held to 'bring together international experts to devise a programme to enable New Zealand to "catch the knowledge wave".' (McLoughlin 2001:2). In the developing world, many invest a great deal of their limited capital and hope in education, particularly the education of their children. Most believe that the search for knowledge and truth through education is the foundation of a freer and better-developed world.

With all the manpower, thought and money currently being poured into the knowledge industry and the global educational enterprise one could expect the human species to be well educated. One could also expect a wealth of literature and analysis on how education can open the doors to national development as well as personal development. It is true that humans have harnessed many of the forces of nature and applied the lessons of science to create technology. Many use this technology for lifestyles that were not possible a few decades ago. It is also true that humans are very good learners. As John Abbot puts it 'humans are born to learn and learning is what we are better at than any other species' (Abbott & Ryan 2001:7). And yet as the human species begins the third year of the twenty first century, rather than celebrating our achievements, we are faced with a world where according to the World Bank an estimated 125 million children do not attend school and millions more adults will live their lives without functional literacy and numeracy (Wolfensohn 2000:2). Out of this, 97 per cent of them are in the less developed regions and 60 per cent of them are girls. (WEF 2000a:8). The most recent

figures on illiterate adults date to 1998 when it stood at 880million.(WEF 2000a:11). It is one thing to acknowledge the role of education in development and it is quite another to achieve it.

Even if people do manage to get an education they may waste years learning things they will never be able to use or apply. In the developing world most will never get the jobs or be able to live the lifestyles they read of or see on television. In many parts of the world, village schools have been built but they stand empty because of lack of teachers, funds or because the opportunity cost to families of not having children working is too great for them to bear. When thinking of achieving Education for All (EFA), the questions that need to be asked include, why build expensive schools and teach children subjects that are completely irrelevant to their daily lives? Why have so many vocational programmes failed and why are there so many unemployed graduates in developing countries? Does Information and Communication Technology (ICT) open doors for even the most rural villager, or has it instead simply increased the divide between the haves and the have-nots?

In much of the developing world, education can become the domain of the elite propagating unequal social structures, increasing the gap between the haves and have-nots, and providing an escape route to the west. Schools are often criticised as arenas of political indoctrination rather than a place of enlightenment and empowerment. There is also the danger of education becoming a never-ending spiral with an endless demand for higher and better qualifications. This can result in unemployment and disillusionment of graduates whose aspirations have been raised. Educational inflation can result in what Dore calls 'Diploma Disease' with a 'supply-led spiral' and qualifications being simply a 'filtering device' (Dore 1980:28). The 'Law of Zero Correlation for Development' (Fagerlind & Saha 1983:238) states that, as people participating increase, the social benefit of those achieving that level of education will decrease.

While it is important to keep all these things in mind when designing educational solutions we should not lose track of the fact that for individuals and families, education is still the key to self-improvement and family advancement. For governments it is still considered to be a necessary component of development. Gould (1993:13) points out that in the last thirty years there has been a rapid growth in the private demand in almost all Third World countries for education and suggests it is 'part of a universal movement'. Education in the Third World is a major criteria for individual's 'lifestyle, career opportunities and life chances generally' and cost benefit analysis has shown a 'strong and positive correlation between lifetime earnings and level of education.'(Gould, 1993:16). World Bank research shows high rates of return in excess of 20 to 30 percent for education showing that even if students have to borrow money

for an education it is still considered to be 'a very highly productive private investment' (Psacharopoulos & Woodhall 1985:119).

Part of the problem is that many of the effects of education may not be easy to see directly. A number of human development indicators show an indirect and yet strong correlation to education. Gould (1993:135) points out 'a truly astonishing sensitivity of childhood survival-ship in developing countries to the length of formal schooling of the mother.' Even after adjustments for economic factors, child mortality rates fall by 20%, improving with each level of educational attainment. For example 'Indian children are twice as likely to survive if their mother attended secondary school.' (Gould 1993:135). Education gives women choices and more control over their lives and those of their families. Many other studies have established a causal link between education and other Human Development Indicators. In India if a woman has more than a secondary education the incidence of domestic violence falls by more than two thirds (UNDP 2000:34). For mothers 'the rate of under nutrition in children is as much as 20% lower amongst children of women who have gone no further than primary school compared with children of illiterate mothers' (UNDP 2000:76).

Education, however, cannot be seen as a simple panacea for the world's ills, as a simplistic model or solution to the development needs of the world. The relationship between education and development is highly complex and not all schooling results in better educated, more productive, and empowered people. There are also many quantitative implications associated with the millions of uneducated people without an education throughout the world. Governments and aid agencies must constantly place education alongside the other competing demands and needs. There are qualitative implications of what form and direction education should take and how standards can be maintained and improved. Human Capital Theory (HCT), for example, initially linked education directly to economic development. This was much criticised in the 1970s and 80s because it failed to take into account the complex array of factors that affect human beings in developing countries. HCT has recently re-emerged, now acknowledging the complexity of relationships between education and development. The basic proposition that education makes individuals more productive still holds firm and is now widely accepted by academics, politicians and people in general. As Schultz (1993:18) reaffirmed, 'It is 'human capital', not space, cropland, energy and other physical properties of the earth, that is decisive in improving the income and welfare of people.'

Education should not be seen in simplistic terms, as a fast track for governments and individuals to achieve economic prosperity. There is a need for a critical awareness of the issues associated with development and what kind of development is best for a particular

country. To simply follow present western models of education and development means not learning from the past and to unquestioningly propagate a form of western cultural dominance. What is needed is a kind of education that takes into account all the qualitative, quantitative historical and cultural complexities of a particular country and uses this information to create new and innovative educational models that will lead to sustainable and appropriate improvements for all.

## **Thesis Structure**

In this thesis the author explores the complex relationship between education and development and the ways in which education can be the key to a more equitable and sustainable process of development. Chapter 2 is a survey of the historical relationships from the colonial education systems, that educated many of the first leaders of less developed countries, through to the April 2000 Education for All (EFA) Conference at Dakar. The quantitative and qualitative issues associated with achieving Education for All are analysed in Chapter 3. This chapter also includes a case study of the two EFA Conferences at Jomtein in 1990 and Dakar in 2000 and some analysis of what has been achieved. Included in this chapter is a model for self-assessment that is used in educational institutions world wide as a means to encourage institutional learning, evaluation, and improvement.

The way education has to stand alongside other developmental needs and can help solve some of these other issues is examined in Chapter 4. Examples include school feeding programmes, the effects of war in Lebanon, and the influence of education in the state of Kerala in India. The section concludes with a case study of the Captain Mike School Milk Project in Lebanon, in which the author was an educational and development consultant. It illustrates how an educational project can incorporate nutritional, environmental, and financial issues. It is also an example of how both multinational and national companies are willing to underwrite developmental projects when there is a perceived advantage to them.

In Chapter 5, Education Without Walls, the role of non-formal and distance education in achieving educational and development goals is examined. Both distance and non-formal education are not space or time bound and can be used widely to meet the rapidly increasing demand for education in developing countries. Because the learners remain in their context, there can be a synergetic use of international expertise, indigenous resources and effective teaching, allowing learners to construct immediate applications. This kind of education can become an engine of mediation between the classroom and the community, empowering people

in their own political, cultural, economic, and social transformation. It can also make life long learning a reality and not just a nice idea. This section concludes with a case study based on a survey of Distance Education students in Pune, India.

The final chapter brings together some of the complex array of ideas and relationships that exist between education and development. Education for all is shown to be more than an ambitious development objective. It is presented as an essential part of the methodology of any development effort. It is the conclusion of the thesis that education that is culturally relevant, appropriate and accessible can be the key that empowers people to unlock the doors that block their own and their nation's development.

## **Chapter 2. Education and Development**

### **The Historical Relationship.**

The history of education and that of development are very much interwoven. In the period from the colonial times until today it can be divided into four phases. During the first phase many countries that are today called developing countries were dominated by colonialism. Under colonial rule the colonial governments controlled all the social and political structures including education. The second phase lasted from the late 1940s until the early 1960s. This was a time of optimism and high expectations of World Development and the educational focus was on eradication of illiteracy and pressure to expand elementary education, especially in the newly independent countries. It was a time where there was a large amount of spending on expanding traditional education systems. The third phase lasted from the mid 1960s until the late 1970s with a focus on illiteracy and an increasing demand for accountability in educational spending. It was also a time when development thinking moved from large infrastructure projects to the provision of basic needs. The fourth phase, from the early 1980s until the present, has seen the emphasis shift to the idea of providing basic education to meet basic learning needs. It is a period of contrast between neo-liberalism and a growing awareness of global issues and the need for sustainable development. It is also marked by global initiatives such as the Earth Summit in Rio de Janeiro and, for education, the 1990 and 2000 World Education Forum (WEF) Conferences on Education for All (EFA).

### **The Colonial Period**

Before WWII the education systems of many less developed countries were under the control of colonial governments. It was a time of European worldwide expansion and could have been a time of significant intercultural learning. Rather than opening doors, however, many colonial educators closed their minds to the lessons that could be learned from the indigenous cultures. The framework of colonialism not only helps us understand colonial education systems but it is useful in understanding some of the aspects of contemporary education in developing countries.

During the colonial period the confidence in formal schooling, as an agent of change, grew. Prior to the industrial revolution formal education had primarily been the domain of the rich and elite who were educated to make the best use of their leisure time. Most other children learnt from their parents in an apprenticeship role. Industry, however, meant people moving into urban centres and a primary aim of education became preparing workers for their place in industry. Henry Pritchett, the first president of the Carnegie Foundation, captured the spirit in his 1907 speech when he said:

*'What is needed is an education system that is carefully adapted to the needs of the economy. Such a system must seek to produce economically useful knowledge and so sort people efficiently in to the various positions that need to be filled in the stratified occupational structure.'* (Labaree 1997:113)

To be this sort of efficient economic unit workers needed a curriculum that would teach them to be able to read basic instructional manuals, fill out order forms, and do basic mathematical calculations. What is now known as the three Rs or back to the basics.

There was, however, a fundamental difference in the education systems that developed in the metropolitan countries and their colonial empires. Schools in the metropolitan countries were connected to the dominant modes in their societies, reflecting the social and economic realities, so that charity schools taught the poor a distinct education from that of the upper class schools. Schools, however, in the colonial countries were detached from the indigenous cultures and designed to meet the needs of the colonizers, and not the children of the colonized.

Altbach and Kelly (1978:1) in their classic work on Education and Colonialism identify three different types of colonialism. The first is 'classic colonialism' as seen in India where all the important decisions were made in the metropolitan countries. The second was 'Internal Colonialism' such as in America and New Zealand, where indigenous populations were, and often still are, dominated by another group. The major goal of education under this type of colonialism was integration or assimilation of the native ethnic group into the culture of the dominant group. The third type of colonialism is 'Neo-colonialism' and is the continued impact of the education systems of the 'developed' countries over the now independent nation states.

Most of the schools that were found in the colonies were either based upon the classic colonial or internal colonial models and reflected the power and educational needs of the colonizers. Rather than education being a key that opened doors between the cultures there was no attempt at integration or to prepare the students for leadership within their own society. Often the major purpose in the colonies was to develop an educated middle class who would be loyal to their colonial ruler and be a cheap and efficient source of government servants and candidates for the modern professions. Altbach and Kelly (1978:3-4) describe it as:

*'The colonizer established the schools to fit people into a world different from the one in which they were born and in which their parents lived and worked...parents had no role at all in determining educational content, even that part of the curriculum that emphasized indigenous culture.'*

The colonisers controlled the school's organisation, curriculum and the methodology of education. The rulers were the ones who made all the educational decisions – who should go to

school, for how long, what they should learn, what language it should be learned in, and the use to which that education could be put. The curriculum of most schools tended to

*'emphasize two things – language instruction and moral education' they 'also taught "practical" subjects—namely, Western hygiene (often called general sciences), computational skills, and agriculture or some kind of craft or manual labour.'* (Altbach & Kelly 1978:12).

There was a total devaluation of indigenous culture, language, methods of learning, and even history, when it was taught, was from a colonial perspective. Altbach & Kelly (1978:15) say:

*'The implications of this are enormous, for what occurred in colonial education was a simultaneous obliteration of roots and the denial of the wherewithal to change, except on limited terms. With this education, one might become a secretary or interpreter; one could not become a doctor or a scientist, or develop indigenous cultures on their own terms.'*

Colonial administrators were often oblivious to the effects of education on the local society and 'questioned the educability of those they ruled' (Altbach & Kelly 1978:4). Often the motivation for attending school came from those in the colonial societies who saw the opportunity for economic and social mobility and whose faith in indigenous structures had been shaken by the apparent permanence of foreign rule. For example, the 'East India Company started as a purely trading venture' in 1757 (Ansprenger 1989:5) but then came to see itself more as a 'civilising mission' (Fieldhouse 1987:23). Both the government and mission organizations introduced schools. The education system, however unintentionally, changed the balance of power. Most of these youths were not from the upper castes but were middle caste, richer peasant families, who often acted as intermediaries for the British and worked hard to educate their children, seeing advantages for upward mobility. These educated 'rich peasants' (Jeffrey 1981:101) became the first leaders of the newly independent country.

In many countries the education systems are still modelled on these colonial systems and the impact of neo-colonial education can be seen at many different levels. At the curriculum level many of the subjects taught and examples used are more American and European. The language of education is normally that of the colonisers so, for example, in India it is English and in Lebanon, French. In Africa and Asia many school systems and exams are British or French based. In South America, Spanish and Portuguese are the dominant languages of education. Many of the textbooks, and resource materials are American or British in which all the examples are American or European. In Lebanon the French Baccalaureate exam or the American SAT I and II Exams can be sat as an alternative to the Lebanese National Exams to meet entry requirements for local universities. Education that opens the doors to development needs to overcome the constraints of its western and colonial heritage. There needs to be a valuing of indigenous knowledge systems and ways of learning. This will be further discussed in Chapter 3 when we explore the issues of quantity and quality associated with supplying EFA

that is culturally relevant and appropriate. It will also be discussed in Chapter 5 when we look at alternatives to formal education under the heading of 'education without walls'.

## **World War Two (WWII) to the early 1960s**

With the break up of the former colonies following WWII and the success of the 1947 Marshall Plan in Europe there was a spirit of optimism and international cooperation. The idea of development was largely seen in terms of modernization and economic growth. The 1944 Bretton Woods Conference led to the founding of the IMF and World Bank. In 1945 the UN was formed and on December 10<sup>th</sup> 1948 the UN adopted The Universal Declaration of Human Rights, Article 26 of which states:

*'(1) Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.*

*(2) Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.*

*(3) Parents have a prior right to choose the kind of education that shall be given to their children.'* (*The Universal Declaration of Human Rights, reprinted in Morsink 1999:335*).

For most of the fifty or so UN member countries at that time, they already had some measure of free and compulsory elementary education. The magnitude of the task of giving every child in the world an education, however, was 'not fully appreciated internationally until a decade or so after the Universal Declaration.' (UNESCO 2000a:40). In the early 1950s education systems the world over began a process of expansion that was without precedent in human history. Coombs (1968:164) calls this 'the student flood' released first by 'an explosion of human expectations' and then by 'a population explosion'. This was seen in the demand for student places and an increasing demand for expansion of elementary education beyond the first few years. It also involved the millions who were unable to gain access to formal education. A 1950 survey showed 97 of the world's 198 countries having half or more of the adult population illiterate. (UNESCO 1957:14).

Not only were there issues associated with the sheer number of people needing to be educated but also issues associated with what form that education should take. The social and political environment of the dominant countries still influenced the type of education promoted at this time. The Universal Declaration (Morsink 1999:335) says 'Education shall be directed to the

full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms.’ It also speaks of ‘fundamental education’ when referring to the right to an education of illiterate adults. At the time of drafting fundamental education included ‘skills of thinking and communicating’; ‘vocational skills’; ‘domestic skills’; ‘self expression in the arts and crafts’; ‘education for health’ and ‘spiritual and moral development’. (UNESCO 1949:11-12).

The 1960s were a time of public spending on education. World Bank estimates there was an increase to about 15% of GNP in most countries (World Bank 1980:67). There were a number of factors that contributed to this. A major cause of the impetus for this type of investment was ‘Human Capital Theory,’ first articulated by Schultz in 1960 (Fagerlind & Saha, 1983:18). It was the educational part of the Modernisation Framework and focused on the productive capacity of humans, seeing improvement of population quality as a resource. This changed the view of education from being seen as a form of consumption and a drain on the economy to seeing it as a productive investment. As Schultz (1963:46) put it, ‘Schooling and advance in knowledge are both major sources of economic growth.’ In his Nobel Prize Lecture in 1979 he said, ‘The decisive factor is the improvement of population quality’ (Schultz 1993:13). Simon (1981:348) took this further saying, ‘The ultimate resource is people.’

Human Capital Theory was also very successful in the theoretical and political framework of the 1960s. Politically the Cold War and the fact that development was seen primarily in economic terms meant the US and other *first world* countries encouraged countries to follow capitalist development and not fall into the communist *second world*. ‘The theoretical base of this was ‘growth theory’ which was based on the transfer to the *third world* [italics mine] of a series of Keynesian models’ (Brohman 1996:11). The Keynesian framework encouraged governments to have a visible role in economic management and so spending on education was not only socially popular but also economically meaningful. Teixeira (2000:262) says the combination of ‘momentum in the field of economic growth following WWII’ and ‘efforts to clarify the source of economic growth created a space of convergence between economic growth and human capital theorists...human capital theory suggested an important link between investment in education and economic growth.’ The work of Edward Denison (1966) in attempting to identify the contribution of different productive factors to economic growth suggested that the quality of factors was more important than their quantity. Human capital theorists, such as Schultz, who frequently quoted Denison’s work, often used this perspective. (Schultz 1963:45).

In the area of Development Studies, education as the means of achieving improvement in human capital was promoted. Arndt (1987:52) saw it as ‘a necessary if not a sufficient condition for economic growth’ ‘W.Arthur Lewis, one of the most important pioneers in this subject, emphasized the critical function of education in the development process’ (Lewis 1955, cited in Teixeira 2000:263). This was later given the wider conceptual base of the modernisation theories. For example, in Rostow’s theory of economic *take off*, if a traditional society could mobilise sufficient savings, develop a leading sector and the right political and social conditions they would achieve the conditions for ‘*take off*’ into a modern economy. The key players in Rostow’s analysis were ‘*entrepreneurs*’ who ‘must come to perceive it to be both possible and good to undertake acts of investment’ (Rostow 1956:40) These were more often than not the educated of society. McClelland (1970:179) saw these people as being high in ‘the need for Achievement’ a characteristic he termed ‘*n-Achievement*’. In the OECD, theory-development activities led to a study group that organised a number of relevant conferences between 1962 and 1965 including one on financing of education in September 1964 and on the social objectives of educational planning in March 1965 (Papadopoulos 1994:38)

Modernisation Theory and Human Capital Theory (HCT) supported the political and nation building aspirations of the leaders of the newly independent countries. Education came to be seen as a mechanism to enhance the process of development. Jawaharlal Nehru, the first Prime Minister of India, was typical of these leaders. His views typify those of many other leaders at the time.

*‘Ultimately the greatness of the nation depends on the number of first rate people it produces in all fields of activity’* (Nehru 1990:83).

*‘The younger generation is our future hope. On them depends the progress of the country. The way their faculties are developed and minds moulded will make or mar India’s destiny. Hence the need to give top priority to the educational needs of the growing generation.’* (Nehru 1987:407).

The problem with this model of education is that it was seen primarily in Western terms of promoting modernisation and developing the population to the point where national economic ‘*take off*’ was possible. It failed to take into account the complex of other political, social and economic factors needed for this sort of economic development. It also failed to see that there might have been other, non-western models of education and development that were equally valid. It encouraged investment in forms of education such as university training courses, and western curriculum’s that could be seen as having a direct *rate of return* to the economy. This led to an over-supply of inappropriately qualified graduates looking for particular types of ‘white collar’ jobs and to the problem of ‘educational inflation’ (Scrase 1997:140) or what

Dore (1980:28) calls Diploma Disease. Basing education systems on western models also created the inherent problem that students would always be looking at research generated in the west and the best graduates would be drawn to the west. This failure to take into account the complex array of factors and the overly optimistic approach of seeing education as a simple solution to achieving economic growth and development eventually came under fire as we will see in the next section.

### **Mid 1960s until late 1970s**

Formal education continued to expand during this period. Christopher Colclough (1980:1) in a World Bank staff paper noted that 'enrolments at primary level more than doubled in Africa and Latin America between 1960 and 1975, whilst in Asia they increased by almost 80 per cent. Growth at secondary and tertiary levels has been much faster'. This growth in education especially at the secondary and tertiary levels had significant budgetary implications for many countries.

For non-formal education this period is typified by the concept of 'functional literacy' and it began with the *World Congress of Ministers of Education on the Eradication of Illiteracy* held in Teheran, September 1965. They provided the rationale for what was to become the largest ever internationally sponsored programme specifically focused on the eradication of adult illiteracy: the 'Experimental World Literacy Programme (EWLP)' (Bastille 1976:35). 'EWLP was widely regarded at the time as a breakthrough in international recognition of the role of education in development' (UNESCO 2000a:34). It was promoted as a solution to socio-economic problems and its primary focus was work orientated. Unfortunately such a campaign was fated to disappoint because unlike a bridge or power station it is not easy to demonstrate social and economic returns. Even though it failed to lead to a global campaign it did lead to many individual mass campaigns and broadened the concept of literacy to the idea that it should enable adults to function or be functionally literate in a wide range of situations and activities.

In the development field this period is typified by the gradual disillusionment with Modernisation Theory. As Elliot (1996:5) points out 'in light of rising world poverty and inequality in the 1970s (the second UN Development Decade), the optimism of such a speedy end to underdevelopment faded.' There was a realisation that the economic benefits of growth were not 'trickling down' to the most needy and so there was a growing interest in supporting projects that met people's basic needs. Even in developed countries this failure was noted. In the United States the famous 1967 Coleman Report, which sparked the school effectiveness

movement, noted the 'weak effect of schooling on the promotion of social mobility and in the reduction of income inequalities.' (cited in Teixeira 2000:266)

In Latin America there was widespread disillusionment with both modernisation and Keynesian structuralism. Some Marxists such as Andre Gunder Frank began a search for a new approach that eventually led to the ideas of dependency or underdevelopment theory. In this analysis 'some countries (the dominant ones) can expand and be self-sustaining, while other countries (the dependent ones) can do this only as a reflection of that expansion' (Dos Santos 1970:231). Underdevelopment was not seen as an original condition of traditional societies but as a process whereby as some countries develop there is 'simultaneous generation of underdevelopment' (Frank 1970:5) in others. Foreign models of education could also, therefore, be seen as part of the cause of underdevelopment reinforcing dependency structures.

At this time for Brazilian Paulo Freire the remedy to the condition of underdevelopment and oppression lay in the type of education given. In his famous 1972 book he called this process 'conscientizacao'. He believed that literacy should be accompanied by the learner's increasing consciousness of his/her existential situation and of the possibility of acting independently to change that situation. In his view education needs to be a liberating experience that 'illuminates reality'. 'It challenges the students to unveil the actual manipulation and myths in society' (Freire & Shor 1987:172). Students are liberated when they are free to create their 'own construction of culture' (Freire & Shor 1987:112). He considered 'the fundamental theme of our epoch to be that of domination - which implies its opposite, the theme of liberation, as the objective to be achieved.' (Freire 1993:84). For Freire this could not be achieved through the 'banking concept of education' (Freire 1993:53) where students were seen as objects to be filled and stores of information. Freire saw the methods of education as being as important as the content. Liberation results from a form of education that involved dialogue and problem posing where people's dreams become the subject through a process of action and reflection. For Freire, 'It is impossible to dissociate techniques and methods from the possible dream.' (Freire in Bataille, L. (ed) 1976 :199). For Freire people become conscious of 'the situations that limit them: the limit situations' (Freire 1993:80) and are empowered to transform those situations. He saw development as an issue of justice and empowerment rather than wealth so, for Freire, the liberation that comes through this type of education is development.

At the same time in the developed world there was an increasing awareness that quality and not quantity was the important ingredient in education, and with the oil crisis and recession in the 1970s, a call for greater accountability on educational spending. The 1967 Coleman Report in the United States and its findings that socio-economic factors determined achievement and

schools made little difference sparked the ‘emergence of the school effectiveness movement’ (Stoll & Fink 1997:27). In the developing world, studies by the International Institute of Educational Planning and the Institute of Development Studies at Sussex University, showed that teacher characteristics have a major effect on the academic achievement of students in the Third World with teacher training and qualifications being major variables. (Fagerlind & Saha 1983:183) These findings supported the conclusions of New Zealand educator C.E. Beeby that teacher education was a crucial issue in the Third World. (Alcorn 1999:283). Unfortunately, as Beeby pointed out, most schools in the Third World were at the ‘Dame School’ or ‘Formalism’ stage where memorisation was important because teachers did not have the confidence to ask questions they didn’t know the answer to. (Beeby 1965:72).

Unfortunately, this period is also marked by a failure to really learn from the lessons of the past. In many developing countries formalism and rote learning remained the reality. Freire tried to change things in Brazil but eventually was forced to leave. The revolutionary government in Grenada attempted to unpack the effects of colonialism (as outlined in Chapter 5 of this paper) but this was brought to a dramatic end with the US Invasion of Grenada. For lending institutions and governments of poor countries the emphasis upon basic needs became overridden by the problems of rising national debt and the failure of many third world countries to be able to feed let alone educate their rising populations. Even though numbers being educated grew, often populations grew even faster which lead to a growing desire to find realistic and sustainable solutions.

### **1980s to the Present.**

The modern period of development from the 1980’s to the present is one marked by many shifts and tensions within development theory and practice. The collapse of communism in Europe means for many, that the market is now not only seen as a way of allocating goods and services but as the way to regulate society and solve the world’s development problems. Within this neo-liberal framework economic growth and efficiency have replaced the ideas of redistribution and social justice. The assumption is made that the middle class western way of life is the only way to guarantee human happiness. In contrast to this has been a growth of alternative development paradigms with emphasis placed upon sustainability, environment, human rights, capacity building, women, and holistic approaches to development. This involves a much more local approach to development that places the emphasis upon empowerment and participation. If those living in the developing world are to make wise and informed choices, within this environment, then the education they receive must meet their needs so that they are appropriately informed and empowered. This type of education would

open up the possibility of new more locally based paradigms. It would also help people unlock the doors to their own and their countries development rather than implement the ideas of others, which may be flawed or driven by self-interest.

The many shifts and tensions in development theory and practice have often left developing countries with many problems. Schuurman (1996:1) begins his study of this period with the words:

*'Many developing countries will remember the 1980's as the lost decade. The same assessment could perhaps be applied to the field of development theory. Especially from the mid-1980s onwards an increasing number of publications outlined the contours of what became known as the impasse in development theory.'*

The 1980's were the time when many developing countries in the midst of a spending spree. As John Martino puts it: *'They [the third world countries] borrowed massively in an effort to follow the Asian tigers into the first world'*. (Scrase 1997:38). But instead of self sustained growth (to use Rostow's term) they ended up in debt. We now see different views of development with each new attempt redefining the problem. Developing countries and donor agencies are caught between those advocating neo-liberalism with large-scale sector and global solutions and those advocating local empowerment and alternative development solutions. The result is a tension between the various solutions even within the same donor agencies.

On the political stage both globalisation and the end of the Cold War have marked the period. Things such as regional conflicts, human rights, population, economics, and environmental degradation and terrorism are now seen as global rather than purely local issues. The growing power of globalisation is seen in multinational companies, international agreements, structural adjustment programs, and in the increased power of international organisations such as the UN, World Bank, WTO, and IMF. The break up of the USSR in 1991 left the ideology of capitalism and the importance of the market unchallenged in the world. State interferences and centralised planning became unpopular and were considered to be ineffective. Liberalisation of the economy, limiting the role of the state were seen as the solution but as Schuurman (1996:11) points out 'the withdrawal of the state led to increasing impoverishment of low-income groups.' When Third World nations subsequently ran into problems meeting their debt burden the IMF and World Bank forced them to engage in programmes of structural adjustment (SAP). This, however, resulted in an even greater reduction in social spending with the growing need for poverty reduction and meeting people's basic needs. Crush places some of the blame on the actual development agencies. He points out that by defining something as underdeveloped those responsible for development then give themselves a problem they can solve in their own way.

*'The language of crisis and disintegration creates a logical need for external intervention and management...Development animates the static and manages the chaotic. It has a powerful habit of using history to apportion blame to its immediate predecessor for the disorder it attempts to amend.'* (Crush 1998:10).

Structural Adjustment Programs (SAPs) often failed to help poor countries solve their problems because as Chahoud (1991:34) points out, often these programmes were designed without checking out their social impact.

*'The principal victims of failed adjustment policies are the members of the lower strata. For the majority of the population the so-called elimination of inefficiency in the public sector and the introduction of market-orientated price policies mean, invariably, mass redundancies, the withdrawal of subsidies on basic foodstuffs and public transportation, and cuts in public health services and education.'*

The result of this failure is that international organisations are often caught between the self-evident needs of the Third World poor and the need to help poor countries reduce their debt. Organisations like the World Bank, therefore, end up claiming to be encouraging development through things like Education for All (EFA), while at the same time making debt repayment a priority. As Martino Scarse (1997:38) puts it:

*'Under the influence of Western financial institutions, such as the IMF and the World Bank, the development ideology embodied in the trickle down and human capital theories, so popular in the 1950s and 1960s, has given way to structural adjustment and the wholesale reduction of government services in an effort to repay the burgeoning debt burden. Over the past decade, or more, government attempts to satisfy the "debt squads" have led to a decline in the provision of basic levels of social and educational programs.'*

The role of education in this tension is illustrated by the fact that the World Bank is at the same time enforcing SAP, it is also encouraging EFA. In his address, entitled 'A Time for Action' presented at the second EFA Conference in Dakar, on April 27<sup>th</sup> 2000, the President of the World Bank, James D. Wolfensohn said:

*'No country has succeeded without educating its people; education is the key to sustaining growth and reducing poverty. Everywhere I go I see the power of education to improve people's lives. We have ample evidence to demonstrate that broad-based education is associated with a wide range of indicators of well being, including a nation's increased productivity and competitiveness as well as social and political progress. South Korea, Malaysia, Mexico amongst others have taught us this. Most important, education is a basic human right that frees the spirit from the chains of ignorance. The World Bank is firmly committed to achieving the goal of Education for All.'* (Wolfensohn 2000:1).

Education is seen as the primary key to unlocking the door to economic development. As The Economist puts it

*'All over the world ...educational achievement and economic success are clearly linked – the struggle to raise the nation's living standards is fought first and foremost in the classroom.... Certainly, no one any longer needs convincing that education matters... The new jobs...will require workers that are literate, numerate, adaptable, and trainable – in a word, educated.'* (The Economist 1997:15).

With the rise of alternative development paradigms, however, there has been a shift away from seeing education in purely economic terms to seeing it as a way of empowering and improving people's lives so that they can affect their own development. Amartya Sen sees that we should not limit the effects of education with economic terms like 'human capital' and 'human resource development' that see education as a means to improve production.

*'Being educated, being more healthy, and so on, expand our lives directly as well as through their effects on making us better resources, ...we need a broader concept of development that concentrates on the enhancement of human lives and freedoms, no matter whether that enhancement is – or is not - intermediated through an expansion of commodity production.'* (Sen 1998:734).

The result has also been an increasing awareness that large-scale programmes, and western values do not necessarily meet the needs of ordinary people in the developing world. Words like poverty reduction, participation, empowerment, environmentally sensitive, human rights, indigenous knowledge, capacity building, and sustainable development now mark most development efforts. There is also a growing awareness that education is a key element in this kind of development process. This increasing awareness is seen in the recommendations of world conferences and internationally recognized speakers and writers.

Agenda 21 produced at the United Nations Conference on Environment and Development states:

*'Education, including formal education, public awareness and training, should be recognized as a process by which human beings and societies can reach their fullest potential. Education is critical for promoting sustainable development and improving the capacity of people to address environment and development issues...Both formal education and non-formal education are indispensable to changing people's attitudes so that they have the capacity to assess and address their sustainable development concerns.'* (Agenda 21, 1992:264)

Two of the six International Development Targets (IDT) set by all aid agencies of the OECD (including New Zealand) relate directly to education and several others of the six can be directly improved through education. The two are:

*'ii Universal primary education in all countries by 2015  
iii Demonstrate progress towards gender equality and the empowerment of women by eliminating gender disparity in primary and secondary education by 2005'* (NZODA 2001:27).

Education has also been recognised as playing a vital role in a world that increasingly recognises the tension between the rights and needs of the individual, in particular the child and the disadvantaged, and the need for sector wide global solutions. This twin effect of global agreements and an emphasis upon the rights of the individual has led to conventions such as the UN Convention on the Rights of the Child Article 28, which includes the statements:

*'Parties recognize the right of the child to an education ... they shall in particular: (a) make primary education compulsory and available free to all' (UNICEF 1992a:21).*

Article 29 begins with

*'Parties agree that the education of the child shall be directed to: (a) The development of the child's personality, talents and mental and physical abilities to their fullest potential.'* (UNICEF 1992a:22).

For International Organisations there has been a revision of some of their earlier policies. In particular the sponsorship of two Education for All (EFA) conferences in 1990 and 2000 and their subsequent agreements and programmes. This has led to the awareness that funding of basic and primary education is more important than secondary and tertiary for multi-national and bi-national organisations. As was pointed out in UNICEF's State of the World Children:

*'Despite decades of research findings which regularly demonstrate that investment in primary education yields significantly higher returns in both social progress and economic growth, government spending in almost all developing countries is heavily biased towards higher education for the few rather than basic education for the many.'* (UNICEF 1992b:31)

This tension between basic and tertiary education is seen in the latest review of New Zealand's Overseas Development Assistance. The emphasis is now placed not upon education but upon what sort of education best meets the needs. Education and training have long been seen as an important part of New Zealand aid but when the author asked for figures from NZODA only a very rough estimate was given. In the 2001 review of the NZODA this lack of clarity was confirmed. The report points out that figures vary on what percentage is spent on education and training. 'One estimate by NZODA is that scholarships account for one third of the NZODA budget' of which 82% is provided in New Zealand in tertiary education. (NZODA 2001:56). The review was very critical of the scholarship scheme saying that there was very little link between them and human resource needs. Scholarships often go to the elite, many of whom do not return to their country. The report points out that:

*'World Bank research has consistently shown that the highest social return in development assistance come from investment in primary education and basic literacy. Yet a recent Reality of Aid report put NZODA funding of basic education at 0.1% of its ODA budget.'* (NZODA 2001:57)

In modern educational theory during this period, there has been increasing focus upon the learners and their needs. This parallels the rise of locally based alternative paradigms for

development, which emphasize empowerment and participation. Education is no longer seen in terms of a few years of formal schooling. Elementary education is now seen as being part of basic education designed to meet basic learning needs that prepares people for life-long learning. At the same time as the focus upon individual learning needs there has been an increased awareness of the global implications of education on other human development indicators. One of the problems for governments and development agencies is that there is a tension between theory and practice. The review of the NZODA can say things like ‘we strongly suggest that NZODA channel more its education sector aid dollars to basic, vocational and non-formal education and training.’ Or ‘it is more effective developmentally to target education funds towards primary and lower secondary’ (NZODA 2001:57). When it comes to the reality of giving aid it is much easier, more politically popular, and the benefits are more easily measured if the aid is spent on tertiary scholarships.

In the following chapters the link between education and development problems is drawn out through theoretical discussions, case studies, and the author’s own experience of twenty years of education in the developing world. Education for all is shown to be more than just another development goal and seen as a means of empowering people to effect their own development. Because education is often highly personal it is difficult to show the direct links between education and development objectives. In the chapter on education and other development objectives, case studies are used to show some of these links. Being committed to the goal of education for all and actually achieving it, however, are two very different things. Some of the achievements and failures of the Education for All Movement will be studied. In the next chapter both the quantitative issues and the issues of quality or the type of education that needs to be delivered are considered. In chapter five alternative modes of delivery are examined as ways of achieving the goals of EFA and supply education that empowers people to unlock the doors to their own development.

## Chapter 3. Education for All – Quantitative and Qualitative Issues

### Introduction

If education is to open the doors to development then it cannot be the privilege of the few. It must be relevant, appropriate, and available to all. Education systems the world over, however, face large logistical barriers or doors in their attempts to achieve EFA. There are periodic shortages of funds, teachers, classrooms, and teaching materials; in fact, shortages of everything, except students. There is also confusion on what should be taught and how. The rising flood of students worldwide is fuelled by increasing expectations, of higher and better education, and by the rapid rise in world population. At the same time as increasing students and the spiralling of the real costs per student, there is a growing scarcity of resources. In developed countries this may be exacerbated by a lack of commitment and shrinking government spending but in the developing world the inverted pyramid of rapidly growing younger populations means there are simply not enough income earners and tax payers to support the cost of increasing educational budgets. While these problems have prevented the achieving of many of the targets the EFA Movement has still had a major influence at a policy level of redirecting the development agenda towards basic education, empowerment, and participation.

Unlike many other development problems, which may excite the imaginations of a few but are too vast and difficult for ordinary people to comprehend, education for all is a problem for which there can be innovative, realistic, and achievable solutions. At the personal level, individuals and parents are willing to make considerable sacrifices to obtain an education for themselves and their children. As well as individuals it is an issue that can mobilise the resources of private companies as well as governments and international organisations. Education is something that can add value to any development agenda. EFA and the rights of the child have overtones of moral legitimacy and social justice even when they are portrayed in the economic terms of human resource development. It places those who are most deprived and excluded at centre stage and offers them the tools to effect their own development. If EFA is to be achieved, however, it requires not only funding but innovative thinking at every level.

Much has already been achieved despite rapidly growing populations. According to the Human Development Report (UNDP 2000:4) adult literacy worldwide improved from 48% in 1970 to 72% in 1998. Before 1950 over half the countries in the world had greater than 50% adult illiteracy rates whereas today only 23 countries are listed as having such high rates and

the majority of countries are below 10% (UNESCO 2000a:132-135). The net primary and secondary enrolment improved from 50% in 1970 to 72% in 1998. The total number of children in primary education rose from 411 million in 1970 to 681 million in 1998 representing an 84% net enrolment ratio for the world. (WEF 2000a:29). The number of out-of-school children is declining in all regions except the sub-Saharan Africa and a slight increase in North Africa and the Arab States. The World Summit for Social Development (Copenhagen, 1995) 'fixed 2015 as the ultimate date for Universal Primary Education and this is now the time reference for the EFA movement.' (WEF 2000c:64) By this date it is envisioned that all children will 'have access to and complete, free, and compulsory primary education of good quality.' (WEF 2000c:8). In 1993 the leaders of the nine high population countries that contain over half the world's population produced the Delhi Declaration in which they committed themselves to meeting 'the basic learning needs of all our people' and recognised that 'the aspirations and development goals of our countries can be fulfilled ONLY [emphasis mine] by assuring education for all our people' (UNESCO 1994:5).

These statistics are very encouraging and many of the commitments show high expectations and hopes. There are, however, still millions of children out of school and millions more adults who do not have many of the basic skills they need for survival in today's world, let alone being able to unlock the doors that trap them in a permanent state of underdevelopment. If the current progress is to continue and the goals of EFA are to be achieved there is a need to look much more critically at what has actually been achieved during this period so that we may learn from the mistakes of the past and not repeat them.

## **Education for All – A Case study of the EFA Movement.**

### **Overview**

The modern Education for All (EFA) Movement began with the vision of the World Declaration on Education for All adopted by world leaders at the World Conference on Education for All in Jomtein, Thailand, March 5-9, 1990. This led to a series of other intermediary conferences culminating in a 10 year review at the World Education Forum (WEF) in Dakar, Senegal 26-28<sup>th</sup> April, 2000. History has shown that many of the goals of Jomtein were unachievable by the year 2000 but it seems to have accelerated the effort and led to far more accurate statistics, assessment of the needs, and clarification of the issues. If properly applied and supported these should help direct the development agenda and lead to more realistic goals and objectives in the future.

## Historical Development

Although Education for All (EFA) is a new concept its roots can be traced right back to the drafting of the Universal Declaration of Human Rights where education was recognised as a basic human right. This led to a number of initiatives to achieve Universal Primary Education (UPE) and to reduce illiteracy. The 1960 'Karachi Plan' is an example where the countries of Asia and the Pacific set the goal of achieving 'universal, compulsory, and free primary education of seven years by 1980' (UNESCO 1990:239). These efforts eventually culminated in the EFA Conference at Jomtein.

In 1990, delegates from 155 countries, as well as representatives from some 150 organizations, agreed at the World Conference on Education for All in Jomtein, Thailand (5-9 March, 1990) to universalise primary education and massively reduce illiteracy before the end of the decade. The Jomtein Conference produced the '*World Declaration on Education for All. Meeting Basic Learning Needs*' and a '*Framework for Action: Guidelines for Implementing the World Declaration on Education for All.*' The 'World Declaration on Education for All' contained the Principles, Purpose and Vision of EFA but did not give specific time frames or methods for implementing this. Because of this it was not replaced at WEF 2000. The 'Framework for Action', however, did give suggested time frames and recommendations. These were mostly over-ambitious driven by what Singh (1991:vii) calls 'the phenomenon of end of century thinking' and were replaced with a new Framework for Action in Dakar.

## Has the EFA Movement Achieved Anything?

It is easy to take a rather hypercritical view of the achievements of the Jomtein Declaration and Framework for Action. In his article on the lead-up to the Dakar Conference Brendan O'Malley (2000:20) wrote: 'those with long memories will know we have heard it all before – in Jomtein, Thailand, in 1990, when the same primary education target was set for the year 2000.' He then goes on to point out: 'There are still 125million children who never go to school and of those who do, 150million drop out before they complete the primary cycle. In Sub-Saharan Africa the percentage enrolled has actually fallen - 42million are not in school – and the plight of girls has worsened.' Bellamy (1998:109) says that 'In 1995 of those who entered school only 77% reached Grade 5 and gross enrolments for secondary school were 58% for boys and 50% for girls. However, when we consider only the least developed countries these figures become 58% reaching Grade 5 and only 22% boys and 13% girls going to secondary school.' O'Malley (2000:20) concludes his article by claiming that 'The consensus of aid agencies is that Jomtein's fine words were not backed up by deeds.'

In a more scholarly and statistical analysis Bennell & Furlong (1997) also ask the question: 'Has Jomtein made any difference?' They studied both policy commitments and actual aid commitments to education and specifically basic education. Analysis of this type is difficult because there is no common definition of basic education and certain types of educational aid such as technical assistance or scholarship programmes are listed under different categories and are often spent in the donor country. Their findings were that Jomtein significantly improved the profile of basic education giving it a much higher profile in formal policy statements. Virtually all donors were committed to supporting basic education, however, by the mid 1990s translation of this policy into funded projects remained limited.

**Table 1 World Bank Commitments to Education, 1988-1996 (US\$ million)**

Year	Education				Education as % of total lending		
	IBRD	IDA	Total	Total World Bank Lending <sup>a</sup>	IBRD	IDA	Total
1988	655	209	864	19221	4.4	6.6	4.5
1989	515	449	964	21367	3.1	9.1	4.5
1990	530	957	1487	20702	3.5	17.3	7.2
1991	1516	736	2252	22686	9.2	11.7	9.9
1992	1300	584	1884	21706	8.6	8.6	8.7
1993	968	1038	2006	23696	5.7	15.4	8.5
1994	1500	658	2158	20836	10.5	10.0	10.4
1995	1280	816	2097	22522	7.6	14.4	9.3
1996	921	785	1706	21520	6.2	11.4	7.9
1990-96	8015	5574	13590	153668	7.3	12.7	8.8

Note: <sup>a</sup> for all activities

Source: World Bank Annual Reports, various years.

Source Bennell & Furlong (1997:9)

**Table 2. Bilateral Donor Commitments to Education (US\$ million, 1986 – 1994)**

Donor	Bilateral donor commitments to education (US\$ million), 1986-1994									% Change 1989/90 - 1993/94	
	1986	1987	1988	1989	1990	1991	1992	1993	1994	Current prices	Constant 1993 prices <sup>a</sup>
	Australia	110	105	147	128	181	146	107	177	136	13.4
Austria	33	42	44	46	72	111	111	99	97	113.3	87.6
Belgium	101	99	101	89	97	74	83	69	54	-35.3	-44.3
Canada	59	180	128	249	202	125	120	61	130	-49.6	-56.1
Denmark	13	12	22	7	8	62	54	73	23	231.0	181.5
Finland	18	0	15	28	10	37	10	9	7	-62.8	-67.5
France	939	1333	1357	1766	2301	1378	1506	1513	1633	0.8	-12.9
Germany	678	820	785	753	831	699	864	795	1073	21.5	4.1
Ireland	5	6	4	4	0	6	8	0	10	25.0	53.6
Italy	92	124	159	116	145	196	98	96	37	-51.6	-58.3
Japan	363	453	480	459	704	826	729	882	1215	123.3	91.3
Netherlands	129	86	116	138	275	207	121	67	144	-61.6	-28.8
New Zealand	0	13	49	0	1	39	22	24	29	8.2	-11.0
Norway	41	43	6	35	29	0	37	14	18	-22.0	-30.9
Portugal	0	0	0	0	0	0	37	0	45	0.0	0.0
Spain	0	0	0	10	53	64	55	51	48	0.0	0.0
Sweden	57	60	65	46	74	135	74	92	91	64.9	40.8
Switzerland	10	37	39	53	57	53	51	39	39	-15.2	-26.6
United Kingdom	126	149	172	220	228	299	268	202	179	-2.8	-15.8
United States	320	364	402	455	452	452	430	405	372	-9.3	-21.7
Totals:	3094	3926	4091	4602	5720	4946	4775	4668	5380	14.3	-1.6

Note: <sup>a</sup> OECD/DAC deflator used.

Source: Calculated from data in OECD, Development Assistance Committee, Development Cooperation, various years, and unpublished data for 1994 and 1995.

Source Bennell & Furlong 1997:7

When inflation is taken into account the total commitment to educational donations actually decreased slightly. If educational donations did not increase then we need to see what happened within the developing countries in terms of the percentages spent on basic education. Table 3 shows that the percentages did improve slightly in many countries but overall the increase was not very significant.

**Table 3. Expenditure on Primary Education as a Percentage of Total Public Educational Expenditure.**

Country	1985/86	1989/90	1992/93
<b>Africa</b>			
Burundi	45.0	46.8	44.5
Ethiopia	51.8	53.9	53.6
Guinea	30.8	32.8	35.0
Kenya	59.8	58.1	62.3
Lesotho	39.1	51.0	48.8
Malawi	41.3	48.1	55.4
Niger	-	25.8	30.1 (1991)
Swaziland	37.3	32.9	31.5
Togo	34.0	30.4	31.8
Zimbabwe	28.3	30.5	29.8
<b>Asia</b>			
Bangladesh	46.1	45.6	44.2
China	28.6	31.5	34.0
India	37.1	38.1	38.5
Iran	40.9	33.2	31.8
Nepal	35.7	48.2	44.5
Syria	38.4	38.5	40.5
<b>Latin America &amp; the Caribbean</b>			
Costa Rica	35.1	34.5	36.3
Guatemala	-	29.5	50.4
Jamaica	29.9	34.7	32.7
Mexico	27.4	26.7	30.8
Nicaragua	43.3	38.5	56.7
Panama	38.3	37.0	31.5
Chile	51.0	49.2	48.6
Colombia	39.2	32.1	43.6
Ecuador	45.5	31.3	32.1
Paraguay	36.6	43.9	48.9
Suriname	63.7	60.5	60.5
Uruguay	37.7	37.5	35.7

Source: UNESCO Yearbook of Statistics

Source Bennell & Furlong 1997:25

There were some improvements as the end of the century drew closer. By 2000 The World Bank claimed to have increased its educational lending to \$1.9 billion of which 44% was spent on basic education. (Wolfensohn 2000:1). However, even when this is combined with the extra 1 billion given by a small group of countries it still falls well short of the 10-25 billion over 10 years that Colclough and Lewin predicted in the early 1990s would be needed if EFA was to be achieved by 2000. Added to this is the reality that in many countries those who did go to school often dropped out and millions of adults still remain uneducated. For example, in South Asia and Sub-Saharan Africa, less than three out of four pupils reach Grade 5 and at least 875 million adults still remain illiterate, of which 63.8 per cent are women. This forms a pretty disparaging picture so we need to ask, did Jomteim and the EFA Movement actually achieve anything during this period?

In terms of specific measurable achievements the EFA Movement web site ([http://www.unesco.org/education/efa/ed\\_for\\_all/faq.shtml](http://www.unesco.org/education/efa/ed_for_all/faq.shtml)) agrees that many of the goals were not achieved but they would claim some specific results of the Jomtein EFA Conference. In particular the fact that the number of children in school increased by 10 million per year during the decade and that enrolment in primary school rose from 599 million in 1990 to 681 million in 1998. The number of out-of-school children fell from an estimated 127 million in 1990 to 113 million children in 1997 and the overall adult literacy rate rose to 85 per cent for men and 74 per cent for women. Globally, there has been increased awareness of the importance of early childhood learning in developing the ability for life-long learning that was seen in a 5 per cent increase in enrolment in pre-primary establishments.

International organisations like UNESCO tend to use indicators that give some measure of whether certain basic standards are being met and whether there is any improvement. They identified and measured 18 Core EFA Indicators in a logistics exercise known as the EFA

**Table 4 Core EFA Indicators**

Indicator	Description
1	Gross enrolment in early childhood development programs, including public, private, and community programs, expressed as a percentage of the official age group concerned, if any, otherwise the age-group 3 to 5.
2	Percentage of new entrants to primary grade 1 who have attended some form of organized early childhood development programme.
3	Apparent (gross) intake rate: new entrants in primary grade 1 as a percentage of population of official entry age.
4	Net intake rate: New entrants to primary grade 1 who are of the official primary school entrance age as a percentage of the corresponding population.
5	Gross enrolment ratio.
6	Net enrolment ratio.
7	Public current expenditure on primary education a) as a percentage of GNP and b) per pupil, as a percentage of GNP per capita.
8	Public expenditure on primary education as a percentage of total public expenditure on education.
9	Percentage of primary school teachers having attained the required academic qualifications.
10	Percentage of primary school teachers who are certified to teach according to national standards.
11	Pupil teacher ratio
12	Repetition rates by grade
13	Survival rate to Grade 5 (percentage of pupil cohort actually reaching grade 5)
14	Coefficient of efficiency (ideal number of pupil years needed for a cohort to complete the primary cycle, expressed as a percentage of the actual number of pupil years).
15	Percentage of pupils having reached at least grade 4 of primary schooling who master a set of nationally defined basic learning competencies.
16	Literacy rate of 15-24 year olds.
17	Adult literacy rate: percentage of the population age 15+ that is literate.
18	Literacy Gender Parity Index: ratio of female to male literacy rates.

*Source: UNESCO (2000b:60)*

2000 Assessment. It was launched in 1998 and took 2 years. It took stock of the status of basic education in 180 countries and evaluated the progress achieved during the 1990s. Indicators and statistics allow some quantifying of the problem areas. They tend to measure certain types of things and the effect can be that governments do things to improve those statistics, which can have a positive effect if the indicators are well chosen. The EFA Movement tend to measure things like student/teacher ratios; numbers of trained teachers; pass rates in exams; and how many children last to Grade 5. Literacy is usually equated to four years of schooling rather than some absolute measure of real literacy and numeracy. While all of these are useful indicators especially at a government and inter-government level they tend to be based upon government institutions and formal education. In other words things that are easily measurable by governments. They do not usually give statistics on non-formal education programmes, educational relevancy, and appropriateness of what they are doing. Usually the major benchmarks for formal education is success rate in national and international exams, not how well prepared the students are for life. By introducing other indicators education can be much more balanced and appropriate to the real needs.

In Africa, Latin America and Asia percentages of untrained teachers run between 20-30% (WEF 2000a:43). A survey of 188 villages in four states of North India found that 92% of the rural population was within 1km of a school. However, 21% of these were single teacher schools, 60% had leaking roofs, and 33% of the head teachers were absent on the day of the survey. (PROBE 1999). By collecting this sort of information and making it public the nature of the problem can be much more clearly identified and donor organisations and governments can then be much more targeted in their giving and spending. The indicators, while they do not measure how empowering an education programme is for the learners, do enable more accurate assessment of what has and has not been achieved. This more accurate understanding of the problems has been turned into regional frameworks that are now being followed up.

It is important to recognise the limitations of statistics. Even when they do show improvement in education it is often difficult to ascertain the cause and, therefore, see in which areas the EFA Movement has made a difference. The indicators show that even when children are in school the circumstances can be far from ideal. The EFA 2000 Assessment found that for Indicator 11 (pupil to teacher ratio) 11% of countries have ratios above 50 students per teacher. (WEF 2000a:44). Even countries where these ratios are listed as being much better, the figures can be misleading. For example, in the statistical document for the EFA Conference, for Indicator 11, Lebanon is listed as having a 1:11.5 staff to student ratio (UNESCO 2000c:38). This gives a positive impression of government schools but the real situation is quite different. A few of the teachers in the school, where the author currently works, are also signed up as

government teachers and, therefore, are part of that statistic. The reality is that they only turn up for a few hours a week to these schools even though they are listed as full time for government indemnity purposes. Some of the schools theoretically have more teachers than students. Real staff to student ratios, as in how many students there are in a class, are closer to 1:50 in government schools and these schools often meet in the afternoon and evening so that 'real teachers' who are often working in the private sector, can come and teach in them on a second job basis. It is interesting to also note that for Lebanon that 'Percentage of primary school teachers having required academic qualifications' (Indicator 9 in Appendix 1) is 56% yet the percentage that are certified to teach according to national standards (Indicator 10) is un-listed. (UNESCO 2000c: 36) This is probably due to the fact that there are few national standards for getting a job in a government school and it is only in the private sector schools in Lebanon that teaching certificates are required.

Even with these limitations in mind the EFA Assessment has made a significant difference. For a starter the 18 Core EFA indicators that have been measured around the world can act as a benchmark in future studies. They give accurate records at government and international levels. They also make it possible to assess the magnitude of the task and this can lead to more accurate planning at national and international levels. Another advantage is that by measuring something it then becomes important – we value what we assess. For example, enrolment in early childhood programmes (Indicator 1) is something some countries previously saw as unimportant but now they are going to have to give an account for it. The indicators, therefore, become important in national planning and become important enough to spend money on. The indicators can also act as a counter to the neo-liberal pressure to cut back on all government spending. If it is not being measured education can be seen only as an expense for governments and, therefore, a target of structural adjustment programmes. The statistical analysis and continual monitoring of these 18 Indicators is, therefore, a major achievement of the EFA Movement.

A major contribution of the EFA Movement has been an increase in the commitment in the policy statements of virtually all donors to supporting basic education. In the end the major achievement of the EFA Movement may not be the achievement of its specific targets but the redirection of the development agenda and a more accurate understanding of the real needs. Morsink (1999:212) points out that in the Universal Declaration of Human Rights in the 1950s, the first paragraph of Article 26 contains five components of the right to an education: (1) 'the generic right to education itself,' (2) 'free, at least in the elementary and fundamental stages', (3) 'compulsory', (4) 'technical and professional education shall be available' and (5) 'higher education on the basis of merit'. In paragraph 2 it states that 'all five of these rights are to be

directed to the full development of human personality.’ Fifty years later in the Dakar Framework the words elementary and fundamental have been replaced with the idea of ‘basic learning needs’. To put it in the language of ‘The Dakar Framework’ EFA is a collective commitment to the idea:

*‘that all children, young people and adults have a human right to benefit from education that will meet their basic learning needs in the best and fullest sense of the term, an education that includes learning to know, to do, to live together and to be. It is an education geared at tapping each individual’s talents and potential, and developing learners’ personalities, so that they can improve their lives and transform their societies.’ (WEF 2000c:8)*

Education that empowers people to improve their lives and transforms their societies is an education that can unlock the doors to what development really means in a particular situation. At the time of the drafting of the Declaration of Human Rights the idea of fundamental education referred to the right to education of illiterate adults. It was seen in terms of the ‘most pressing needs of the community’ (UNESCO 1949:11). Basic education as defined in the EFA movement, however, is a much bigger concept than this. Article 1 paragraph 4 of the World Declaration on Education for All (Jomtein 1990) states.

*‘Basic education is more than an end in itself. It is the foundation for lifelong learning and human development on which countries may build, systematically, further levels and types of education and training.’*

Another major achievement of the EFA Movement was the second Education for All Conference known as the World Education Forum (WEF) held in Dakar, Senegal (26-28 April 2000) to review advances in basic education in the 1990s and to reinvigorate the commitment to education for all. At this conference some 1,100 participants from 164 countries adopted the Dakar framework for action committing them to achieve quality basic education for all by 2015. This included specific commitments to early childhood, girls, and the learning needs of young people and adults. It also included a commitment to a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and to eliminating gender disparities in primary and secondary education by 2005. This went along with an overall commitment to improving all aspects of the quality of education and ensuring excellence.

While it is still early days to judge the achievements of this second conference there are some encouraging signs of improvement. Many countries now show strong support for education in their overseas development budgets even if it is not at the basic education level. For example in the New Zealand Official Development Assistance (NZODA) 2000 Annual Review, even though Education and Training is only listed as 9% of the total budget (NZODA 2000:12) when you go into the aid given to specific regions then one finds that a large percentage of the aid to those regions is actually also educational aid. For example, aid to the Pacific is listed as

28%. When we examine this bilateral aid to the Pacific in detail we find that 38% of it was spent on Education. See Table 5.

**Table 5. NZODA Pacific Bilateral Aid in 2000/2001**

Country	Total Bilateral Aid in \$NZ to the country	Percentage spent on Education	Amount \$NZ spent on Education
Cook Islands	4,439,000	35%	1,553,650
Fiji	3,595,000	43%	1,545,850
French Pacific Territories	625,000	100%	625,000
Kiribati	2,818,000	64%	1,803,520
Niue	4,969,000	21%	1,043,490
Papua New Guinea	5,301,000	53%	2,809,530
Bougainville Reconstruction	4,105,000	5%	205,250
Samoa	7,957,000	47%	3,739,790
Solomon Islands	7,350,000	55%	4,042,500
Tokelau	7,310,000	4%	292,400
Tonga	5,467,000	45%	2,460,150
Tuvalu	1,862,000	56%	1,042,720
Vanuatu	5,709,000	60%	3,425,400
Pacific Regional	12,890,000	26%	3,320,000
<b>Total</b>	<b>74,397,000</b>	<b>38%</b>	<b>27,909,250</b>

Source NZODA 2000: pages 12-57

At the policy level the NZODA lists Education and Training as one of its 'Key Themes' saying that 'Education and training are major components of NZODA. This central role acknowledges the importance of knowledge and skills in enabling people to realise their own potential and contribute to the development of their society and country' and they say that the reason for this sort of spending is 'an increasing focus on the achievement of the Education for All goals' (NZODA 2000:25). The 2001 review of NZODA recommends moving from scholarships to the funding of basic education. 'Research has shown that provision of basic education assistance should be a major priority for ODA.' (NZODA 2001:102). In the section on poverty in the Pacific 'Poor quality education and lack of educational opportunities' (NZODA 2001:107) is listed as one of the five root causes. The report cites the Secretary for International Development in Britain that basic education is 'the absolute precondition for progress in development and reduction of poverty' and also 'World Bank research has suggested that education of girls is the single most valuable development intervention a country can make.' (NZODA 2001:107).

AusAID claims that 'The education sector is a priority for Australian assistance receiving about 18% of official development assistance, thus making it the largest sector in the Australian aid programme.' The emphasis is upon basic education and the justification for this spending is based upon the role education plays in unlocking the doors to development. 'Education is development's most basic building block and is vital for alleviating poverty. Our education

efforts will concentrate on providing a broad range of education assistance, with a particular focus on basic and vocational and technical education.’

(<http://www.usaid.gov/au/keyaid/education.cfm#top>)

## Quantitative Issues in Achieving the Education for All

Following the EFA Conference in Dakar there has been an extensive monitoring effort set up. In assessing the effort needed to achieve EFA the figures in Table 6 show that there will be a 21% increase in enrolments between 1997 and 2015 for the world as a whole and a 142% increase in the Least Developed Countries.

**Table 6. Effort required achieving universal primary education by the year 2015**

	Projected primary school-age population 2015 (In millions)	Enrolment Increase required between 1997-2015				Ratio of future effort to past effort
		Annual average growth rate (%)	Annual absolute increase (In millions)	Total absolute increase (In millions)	% enrolment increase	
WORLD	670.7	1.1	8.7	156.1	21.0	1.1
DEVELOPED REGIONS	55.0	–	–	–	–	–
TRANSITION COUNTRIES	20.7	–	–	–	–	–
DEVELOPING REGIONS	595.0	1.3	8.7	156.1	26.9	1.1
Sub-Saharan Africa	147.1	5.2	4.9	88.1	149.3	2.9
Arab States	54.6	3.1	1.3	22.9	72.2	1.9
Latin America and Caribbean	75.8	0.4	0.3	4.9	6.9	0.2
East Asia and Oceania	157.7	–	–	–	–	–
South Asia	164.8	1.6	2.3	40.7	32.8	1.2
LEAST DEVELOPED COUNTRIES	135.1	5.0	4.4	79.3	142.0	2.4

Note: Due to the double counting of some countries which appear in more than one region, the sum of regions may not match totals.

Source (<http://www.unesco.org/education/efa/monitoring>)

When it comes to adult literacy the figures are even larger. According to the EFA figures in Table 7 adult illiteracy is increasing at the rate of 92.2 million per year. In the time frame from 2000 – 2015 this represents a 41.7% World increase and in the Least Developed Countries a 120.4% increase.

**Table 7. Effort required to achieve the Dakar Literacy Goal by the year 2015**

	Required Literacy Rate for the EFA Target 2015 (in %)	Implied increase in number of adult literates between 2000-2015			Ratio of required future effort to past effort
		Annual absolute increase (in millions)	Total absolute increase (in millions)	Implied % increase in total number of literates	
WORLD	89.7	92.2	1 382.9	41.7	1.29
DEVELOPED REGIONS*	99.4	4.5	67.3	6.8	0.63
DEVELOPING REGIONS**	86.7	86.1	1 291.3	55.2	1.37
Sub-Saharan Africa	80.7	14.0	210.7	95.9	1.69
Arab States	80.8	6.8	101.7	94.3	1.64
Latin America and Caribbean	93.8	8.3	124.9	40.2	1.11
Eastern Asia and Oceania	93.0	25.1	376.9	31.7	0.97
Southern Asia	77.8	31.8	477.1	91.6	1.85
LEAST DEVELOPED COUNTRIES	75.5	15.3	229.2	120.4	2.16
E-9 COUNTRIES	86.2	56.1	841.7	52.1	1.36
Bangladesh	70.7	3.1	46.3	133.7	2.31
Brazil	92.6	2.5	37.5	36.4	1.00
China	92.1	16.1	241.7	29.9	0.98
Egypt	77.7	1.6	23.9	97.3	1.86
India	78.6	21.4	321.1	83.0	1.78
Indonesia	93.5	3.2	48.3	37.8	0.94
Mexico	95.7	1.6	23.6	39.1	1.02
Nigeria	82.0	2.4	35.9	88.4	1.36
Pakistan	73.0	4.2	63.4	151.1	2.43

Notes: \* Including countries in transition. \*\* Excluding Malta, Turkey, Cyprus.

Source (<http://www.unesco.org/education/efa/monitoring>)

There have been a number of attempts to calculate the financial resources that would be needed to achieve EFA. The current estimates to achieve Universal Primary Education (UPE) by 2015 vary from 8 – 15 billion a year depending upon different population, enrolment, and expenditure statistics. According to the EFA monitoring site some of the different estimates are

‘OXFAM - US\$8 billion per year

UNICEF - \$9 billion

World Bank - \$13 billion

UNESCO/UIS - \$15 billion’

They point out that ‘Even the highest estimate, US\$15 billion per year, represents less than 0.3% of the total GNP of the developing countries, 0.06% of the total GNP of the developed countries, and 0.05% of the world's GNP. As the World Bank observed in a recent paper entitled, ‘Educating for Dynamic Economies: Accelerating Progress Towards Education for All (EFA)’, ‘Financial projections show that for almost all of the very low-enrolment countries, once the system stabilizes after an initial surge in enrolments has moved through the system (a period of about 10 years), national resources should be able to sustain the system with rapidly declining external financial support.’ (<http://www.unesco.org/education/efa/monitoring>)

They also point out that ‘efforts to mobilize support for EFA among multilateral agencies and bilateral donors bore fruit at the G-8 Summits in Okinawa in 2000 and Genoa in 2001, which

strongly endorsed the commitment made at Dakar 'that no countries seriously committed to EFA will be thwarted in their achievement of this goal by a lack of resources.'

(<http://www.unesco.org/education/efa>)

Much work and commitment will be required to achieve education for all but even if the ambitious goals of the EFA Movement are reached by 2015 it does not guarantee that the people of the world will be empowered to effect their own development. To achieve this it is not sufficient to just make sure that education for all is available, as large a task as this is. There is a need to look beyond costs and numbers and to look at the quality and relevance of that education. As the NZODA Review points out 'Current malfunctioning education systems are orientated to training students for urban jobs that are unavailable to the vast majority of people... It provides young people with a false sense of empowerment and a large number of dropouts and graduates with few useful skills.' (NZODA 2001:107). If education is to empower people then there is a need to relate education to other development objectives in a multi-sector approach. Debt, rising populations, and structural adjustment programmes will mean that many countries will have less, not more, to spend on education. Many innovative alternatives will, therefore, need to be developed if countries are going to be able to continue appropriately educating their rising populations and ensuring that people can use that education to effect their own development. The quality and appropriateness of what is taught in education will need to be continually monitored and adjusted to developing needs.

## **Qualitative Issues in Achieving Education for All**

When considering issues of quality the focus needs to shift from numbers to outputs as we examine in more detail the quality of what the global educational enterprise produces. There is a need to critically examine what is being achieved and design innovative alternatives and solutions in a process of constant improvement. Education should never be something static; it should be about growth, change, and improvement. As internationally known NZ

Educationalist C.E. Beeby put it:

*'Education planning must move increasingly into creation and testing-out of new educational designs involving fundamentally new systems of teaching and learning....If education is to help change the world and to help brighten the lives of more and more people, it must begin by changing and brightening itself.'*

(Beeby 1969:35)

A commitment to achieving EFA is a lot more than building schools, running literacy campaigns or even increasing budgets. It is a commitment to supply the resources, in terms of personnel and programmes, to form a basis for lifelong learning in a way that will transform people's lives and societies. There needs to be a commitment to excellence and self-evaluation

and constant improvement if educational programmes are going to supply people with the keys to effect their own development. This includes capacity building so the education system can not only expand numerically at an exponential pace, but also become a system that is constantly learning, innovating, and improving itself.

Unfortunately, the outputs of many current education systems, especially in the developing world, are ill fitted to the world's rapidly changing needs. The most obvious examples are countries whose education systems are trapped in a colonial time warp, still teaching in the language of the former colonial rulers and using their exams (British A and O Levels, or French Baccalaureate) instead of a system that is nationally and developmentally appropriate. This could be partially solved by changing the exam system but, unfortunately, the problem is often much deeper. Neo-colonialism and modern consumerism is very much a part of the world of education and so the educated elite of a country may have vested interest in maintaining a Western-oriented education system. In most parts of the world schools and universities are primarily first world-orientated institutions, which once established, have their own inertia. They remain western in orientation, background, and ethos and it is difficult for countries to come up with alternative, and more culturally appropriate models. These institutions are also supported from the west with generous grants and scholarships for top students to western universities. Many of the books, journals and much of the research work is based in the west and so often these educational institutions, rather than helping the developing countries, continue the colonial pattern of advancing the interests of the 'donor' countries by supplying them with a continual stream of the brightest and the best. This extends even to immigration policies where for countries like New Zealand and Australia the best way to get sufficient points to immigrate is to have a degree or an appropriate qualification.

In the Garwhal hills of North India, I interviewed a boy who was sitting under a village tree memorizing chemistry formulas. Each week he walked 25km to the nearest school and was the pride of his illiterate parents. Here was their son – he could read and was getting an education. But for this boy much of what he had in his copybooks was out of date and was neither relevant nor appropriate to his needs. The juggernaut of the educational enterprise, was lumbering forward, with teachers teaching things they were taught, regardless of whether it was really helpful, meaningful, or even correct. Educational institutes are often at the cutting edge of change in their various departments and subject areas, yet as organizations they are often lumbering giants, reluctant to change and highly inefficient. Oblivious to the rapidly changing world, they carry on with business as usual with the old arrangements that have served them so well. Rather than adapting and changing they continue with their system of administration,

curriculum, teaching methods, and the methods of teacher training and recruitment regardless of whether they are still relevant or useful.

If EFA is to make a qualitative change in our world there needs to be an emphasis upon quality and relevancy. There will need to be significant changes in the way education takes place, especially in the developing world. It will require innovations in the way educational systems are organized, managed, and financed. It requires a commitment to quality not in terms of grades but in terms of how well prepared the graduates are for life-long learning. The model of the traditional, formal classroom, with the teacher at the blackboard and twenty-five students at their desks, is likely to remain but requires some major innovative thinking. For most of the world's population a system that is designed primarily to prepare preschoolers for primary school, primary students for secondary school, secondary students for tertiary education, is inappropriate and irrelevant. It has a tendency to train those who reach the pinnacle (university graduates) to be academic monks. A large amount of time is spent in the educational enterprise solving academic problems that are perfectly defined, unidisciplinary, and with one correct answer. Every day problems, however, are usually vaguely defined, multidisciplinary, are usually value laden and involve many events and consequences. While academics are necessary in society, and some of the problems they solve can eventually be applied to real world situations there is a need to be constantly keeping pace with the world in which they live. There is also a need for them to recognise how narrowly defined their solutions often are especially when they are working in developing countries as either educators or 'experts'. Only then will those who they are helping or their graduates be appropriately prepared to face real problems and be prepared for life-long learning in a rapidly changing and needy world.

Alternatives to the formal education system will be looked at in more detail in chapter 5 but for the foreseeable future, formal education is likely to remain the main method through which most people receive an education. There is, therefore, a need to look at ways in which the quality and appropriateness of education programmes especially in the developing world can be established and maintained. This issue is not limited to the Developing World in that standards, measures of effectiveness, and the issue of accountability in education, are all major political issues in Western Countries also. In western education systems the Coleman Report (Coleman et. al. 1966) in the United States sparked 'the emergence of the school effectiveness movement' (Stoll & Fink 1997:27) marked by many books with titles like the effective school or the effective principal. When this was later combined with a desire to reduce government spending it resulted in calls for greater accountability. Most effective school studies, however, were based in developed countries where schools are carefully regulated and teachers trained,

so in many cases there was not a great deal of real difference between them. In the developing world however the differences in quality of schools and teachers are very large.

For those working in education in developing countries, just managing to keep track, when you have lack of resources and crowded classrooms occupies most of your time. Worrying about issues of relevancy and appropriateness are difficult especially in an environment where parents are investing huge hopes in their children getting high earning white-collar jobs. One model that is very effective in school improvement in the developing world is that of accreditation. Although at present it is mainly applied to International Schools it is a model that could be much more widely applied. By establishing a set of standards and then requiring schools and programs to go through a self-study process if they want to be recognised this model could hold the keys to encouraging self-improvement and development. The model is studied in detail in the next section under 'Model 1 Self Evaluation, Improvement and Accreditation.' The other major area of difference is in the quality of the teachers. Studies by the International Institute of Educational Planning and the Institute of Development Studies at Sussex University show that in the developing world teacher characteristics have major effects on the academic achievement of students, with teacher training and qualifications being major variables. (Fagerlind & Saha 1983:183). Finding innovative ways of training existing teachers is therefore an important factor in improving education in the developing world. For large scale training non-formal methods are best and this will be developed further in Chapter 5 when we look at the role distance education and in-service programmes can play in training existing teachers. For existing schools and formal programmes it is dealt with in the next section under the heading 'Model 2 In-service Teacher Professional Development'. This is based upon a profession development programme developed by the author and implemented in a school in Lebanon.

### **Establishing and Maintaining Quality in Education Programmes**

In the developing world there are often very few standards when it comes to educational programmes. For those in remote areas they have to live with whatever is available. In cities people often have the alternative of private schools but these are usually expensive and often of questionable quality. Added to this is the problem of it being difficult for potential students to tell the difference between a good school or programme, and a not so good one. Schools and education programmes around the world usually resort to external, often only partially related measures, such as results in exams or standardised tests as a way of proving they are doing a good job. In countries like Lebanon these exams are often of poor quality and require students to memorise large amounts of not particularly useful and sometimes incorrect or outdated

information to gain a pass. This obviously has limited application if we are looking at education as a way of empowering people for their own development. Non-formal education programmes are even more difficult to categorise and standardise than formal programmes. The result is that parents and children in the developing world are often at the mercy of governments caught up with political agendas rather than sound education practice, and also entrepreneurs whose primary motive for getting into education is profit. Even when education programmes or countries are committed to excellence and self-improvement it is often difficult for them to find models that are relevant and applicable in their context. There is a need to develop more effective models that governments, international organisations as well as individual education programmes and schools can use for evaluation and improvement.

Within Lebanon, for example, there is very little government control or regulation of the education sector. The result is a proliferation of schools with the only major criteria being the ability to attract students and make a profit. There is no external review or incentives to improve the quality of teaching and learning through a well-developed system of recruitment, selection, induction, appraisal, and professional development. As a result schools that do know their strengths and are secure enough to acknowledge their weaknesses, need to find ways to make these things public if they want to be judged by legitimate criteria.

In developing countries there is usually no equivalent to a government review of schools. In New Zealand this is the Educational Review Office (ERO) and in Britain (OFSTED). The advantage of these types of organisations is that specific government policies can be checked on to ensure they are implemented. In the developing world, governments often cannot agree upon appropriate standards and even when they do, poorly paid public servants may not act in a professional way when it comes to implementing them. The other disadvantage of this sort of top down inspection both in the west and in the developing world is it only encourages organisations to do the minimum. What is needed is not a system that simply gives a stamp of approval but a system that encourages educational organisations and programmes to look at themselves critically and see whether they are improving and whether their students are developing the skills and the attitudes they need to empower them to effect their own development.

The business world can perhaps supply some direction in developing more appropriate models for evaluation and improvement. The idea that organisations and structures need to be able to learn and adapt was first popularised by Fortune magazine that called them 'learning organisations' and predicted that these 'maximally adaptive organisations' would be most successful in the future (Dumain 1989:48-62). Senge further developed this in his book on

learning organisations called 'The Fifth Discipline'. From his perspective the 'local actors have more current information' and 'are in a better position to manage the continuous adaptation that change demands' (Senge 1990:228). He also points out that solutions based upon superficial observations can be totally misleading because within complex structures and organisations 'cause and effect are not closely related in time and space.' (Senge 1990:63). This is often true when it comes to development problems where the real cause can be quite different from the apparent cause and when outsiders start to change things they may be upsetting a delicate balance of factors. Within a learning organisation the local actors are empowered to effect change so that the organisation can grow and develop.

Another business model is the work on organisational culture by Schein (1992:17) where he points out that people's 'basic underlying assumptions or 'unconscious taken for granted beliefs' are often very different from their espoused values.' Foreigners often find it easy to notice the differences in a new country or education system. Problems often stand out and solutions seem so obvious they wonder why people have not already solved them. Only when one engages with the culture and actually tries to implement change, does one find that it is rarely as easy as what it first appeared. When one attempts to implement change one encounters culture at its deepest and most personal level. If education is to truly empower local people to find real solutions then any improvement or change needs to start with them - with their assumptions and needs. Many of the failed efforts to help countries develop through education may not have been because they weren't good ideas but because of a failure to understand the culture and gain local participation and commitment.

If education is to be a meaningful force in development it needs to start with 'issues which local people speak about with hope, fear, anxiety or anger.' (Hope, Timmel & Hodzi 1984:8). Evaluation needs to move beyond attempting to gather information and ideas. It is not enough to know what the problems are in education in the developing world. We must enable people to construct a new view of reality. This is what Chambers (1997:154) calls moving 'from extracting to empowering.' McInerney & McInerney (1994:181) say 'effective learning occurs when individuals construct their own understanding through interaction with the environment.' It is important, however, to realise that improvement of educational organisations and structures is never easy. As Adams (1996:138) puts it 'buzzwords like participation and bottom up planning do not guarantee success' while they 'trip easily off the tongue, they are more elusive in practice.'

One very useful model, that incorporates both a top down and bottom up approach to achieve improvement in educational programmes is that of school accreditation. This is usually

something that is established by a group of educational organisations as a means of showing certain levels of quality. They then establish a methodology whereby other organisations can join and a way in which continued improvement is ensured. One advantage of this sort of system is it tends to be self-funding and self-regulating in that organisations that give accreditation away too easily, or are open to corruption, simply lose their credibility. These organisations can apply very rigorous standards for evaluation or self review because they are not responsible for correcting the problem the way a government would be if it failed a large number of schools in a review process. These ideas could be extended to the idea of institutional and or programme evaluation in a system of evaluation and quality assurance.

### **Model 1 Self-evaluation, Improvement, and Accreditation. Based upon the International School Accreditation Process.**

Evaluation can be seen on a continuum with external inspection or audit such as the school evaluations performed by the ERO at one end and an internally motivated self grown development model at the other end. The problem with the first is it is totally top down and is more of a threat than an incentive for improvement. The other extreme of total self-development is that humans and organisations are usually more motivated and focused where there is some sort of external incentive. Also in the developing world schools and education programmes that are frequently short of resources and personnel often work long hours so there are significant advantages in having some sort of incentive system. Forms of evaluation that are most effective seem to lie between these two extremes with a process of self-review in order to gain some sort of external stamp of approval or accreditation. This combines the advantages of both top down and internally motivated evaluation. Self-evaluation when it is done in this way can be a powerful tool in organisational and programme improvement. It means that internal local knowledge is brought to bear in a process of review and then used to design solutions. This sort of organisational learning and growth is very much in keeping with the idea of 'learning organisations'.

In this model people running an organisation or educational programme decide to try and gain some sort of external recognition for what they are doing. They then go through a process of self-review where they measure themselves both against their own standards of excellence and the standards set by the accrediting organisation. At the end of the process a visiting team evaluates the self-study and if the school is deemed to meet their own and the organisation's standards they receive the stamp of approval. The process is reviewed every ten years so that the process of improvement is continuous. This sort of model could be applied to any education programme. Various national and international organisations could be set up to give different types of accreditation in terms of how effective the programme is in preparing people

in different ways to effect their own development. The Accreditation Process has long been recognised in international school circles as a highly effective means of initiating and maintaining school improvement while adhering to publicly stated standards. The aim of the process is just as much about school improvement as it is gaining a seal of approval. Accreditation is the affirmation that a school provides quality education and an international endorsement of that quality.

Accreditation has a number of direct and indirect advantages. By being optional then organisations and programmes can choose it or not. They can also choose which accreditation will best suit their needs. For example, an organisation that accredits adult literacy programmes will not be very useful to someone running an early childhood programme. At the same time there would need to be some internationally recognised co-ordination of these accrediting organisations but largely they would end up being self regulatory because those that did not stick to their standards would not be able to maintain a reputation for excellence. No matter how good a job an organisation is doing, its own claim of excellence will always be open to question in the absence of an objective verification of quality. Accredited status can be very reassuring to parents and people trying to decide whether to do a course or join a particular institution or programme. It is an externally moderated indication of an education of quality.

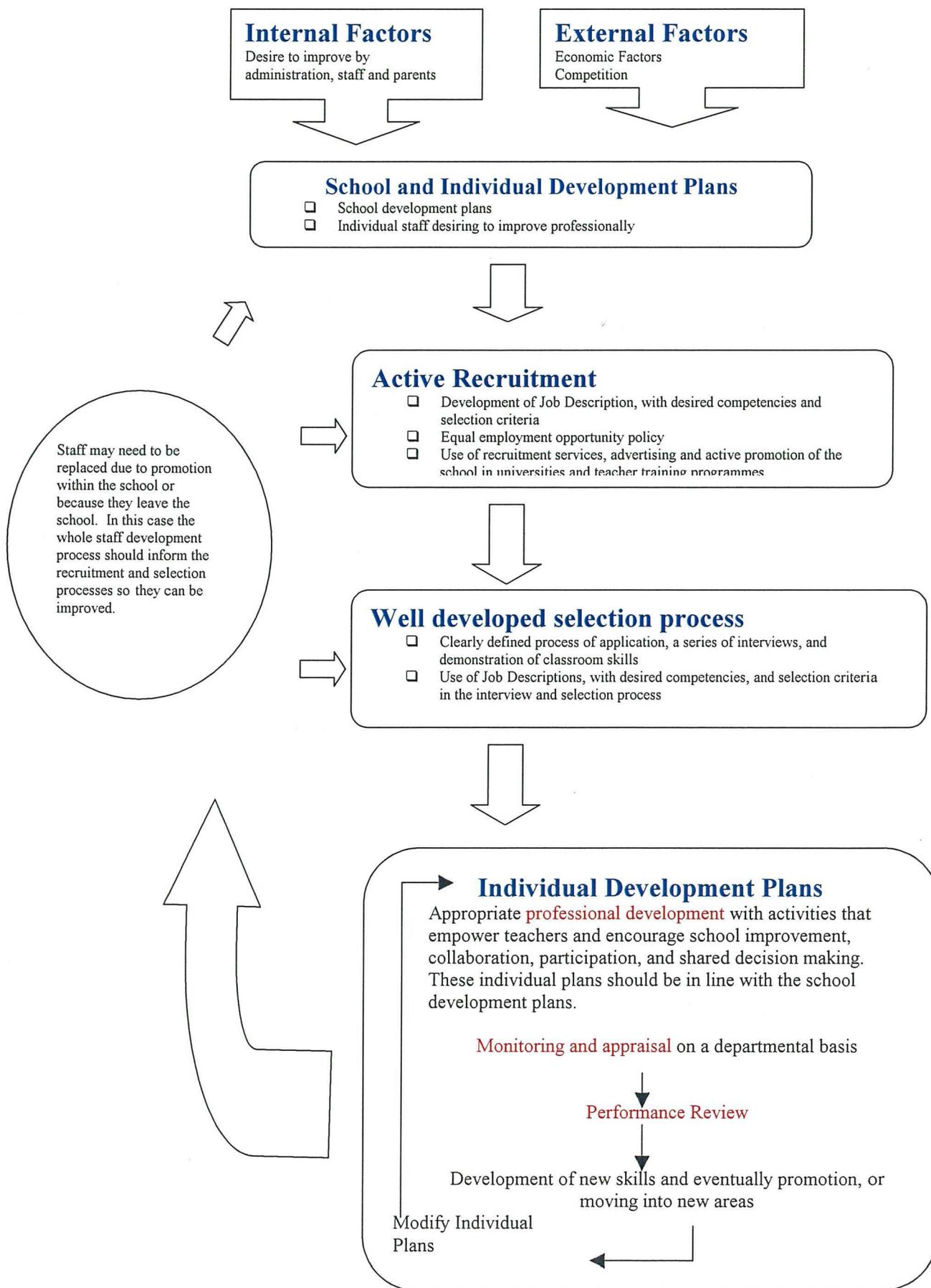
The next major advantage of this sort of process is the opportunity for self-assessment. By having to go through a process of writing a self-study means the organisation is directed towards a goal in its self-evaluation. They have guidelines and standards to follow as well as evaluating themselves against their own internally determined standards and objectives. This sort of process also has a number of side benefits. It increases the amount of collaboration and cooperation within the organisation and also opens up opportunities for contact with other similar organisations or people doing similar types of work. This enables people to learn from others working in the same field and to develop closer links with them. It is also a way to focus on the important and long term rather than the short term and urgent. It is a chance to look carefully at the outputs and focus the energy and resources of the organisation on improving those resources. There are already a number of Accrediting Organisations around the world for different types of programmes and organisations. This type of model is now also widely recognised in the business world and can be used to very good effect. For example, many businesses seek after the International Standards Organisation (ISO) for their environmental standard so that they can list this on their products.

Two of the main organisations that accredit international schools and colleges are the European Council of International Schools (ECIS) and the Middle States Association of Colleges and Schools (MSA). For each of these the process of accreditation consists of an initial self review to see if the school is capable of meeting the standards followed by a preliminary visit by someone in the organisation to see if the school is ready. If this is successful the school receives a comprehensive report suggesting areas that need improvement and is granted Candidacy Status. This is followed by a one to two year self study where every aspect of the organisation is evaluated in terms of effectiveness. Finally, a visiting team comes and studies the self-study report on site and, if successful, the organisation is accredited for a 10-year period. During this time there is a 5-year mid term review and then after 10 years the process of self-review and team visit is repeated. This means the school is in a constant state of review and self-improvement.

## Model 2 In-service Teacher Professional Development based upon a Programme in Lebanon

Figure 1

### Human Resource Evaluation and Development Cycle.



In the author's own experience of working with teachers in the developing world for nearly 20 years, I have found that in-service and on-site training is the most efficient and effective means of improving the quality of educational practice. Universities in developing countries generally try to prove their worth by taking a very academic approach to training. The result is student teachers finish their qualifications with the latest in educational psychology but no training or experience in classroom management or how to teach a subject. The above diagram represents a model the author developed for Eastwood College, Beirut, for their professional development programme. Central to the model is the Teacher Evaluation Form given in Appendix 1. In this type of professional development teachers are given in advance very clear criteria to meet (Appendix 1) and are then evaluated on whether or not they meet those standards.

Many of the processes outlined in the model happen simultaneously rather than sequentially as the diagram implies. At the core of the model is a cycle of professional development of individual staff. It involves using the Teacher Evaluation form to identify areas of need and then drawing up individual development plans for each member of staff. This can happen in consultation with the staff and as an extension of the staff appraisal system. The process involves comprehensive classroom observation, teacher evaluation, and interviews where the various competencies outlined in the Teacher Evaluation form are checked. These then lead on to school and externally based professional development programmes. When used properly this system can be highly motivational for staff. Everard & Morris (1990:90) point out that good appraisal systems enable staff: 'to measure their achievement'; 'recognize their achievement'; 'prepare for advancement'; 'open up opportunities for personal growth'; and 'clear the air of problems.'

Professional development in education should always be linked closely to the evaluation process. This often happens informally and on an individual basis where perceived needs lead to certain workshops being developed and individuals going on courses in areas they feel they need to develop. The model advocates the appraisal and performance review process leading directly to changes in individual development plans and also resulting in appropriate professional development workshops and activities to encourage growth in the needed areas within the whole school. It is a programme that is relatively easy to implement, and makes use of existing personnel and resources. As a model for educational improvement and quality assurance it can easily be modified so that it is applicable in any education programme in any country.

The key in both Model 1 and Model 2 is in centring the process of quality assurance and improvement in the school or educational programme. By doing this those actually involved are the ones who work on methods of improvement. Rather than meeting an arbitrary set of national or international standards, they can select the process and standards that are most appropriate to them and then work on better ways of implementing them in their context. Quality in educational programmes is essential in the developing world. At present the only real skills of far too many graduates are note taking and memorisation. If they are to lead the way in solving the complex problems of development in their own communities the quality of education they receive has to improve. There is a need for experienced educators who see their role as learners and facilitators. As learners they can help others uncover their basic assumptions and help bring them to the surface for evaluation in light of the changing needs in the developing world. As facilitators they can interact with both the local situation and international organisations and research, empowering other educators to supply quality programmes.

Educational change and improvement, however, can never be considered on its own. There are always a host of factors that influence the education that occurs in a particular country. In the next chapter we will place education alongside other developmental issues to see how they influence it. We will also consider how education influences other human development indicators and look at ways in which solutions can be built into educational projects. In particular we will examine a case study of a school-feeding programme in which the author was involved in Lebanon.

## Chapter 4. Education and other Development Issues

In the developing world, education cannot be seen as a single issue separate from all the other things that affect people's lives. Many things affect education and it can play a vital role in affecting and improving other areas of development. If education is to unlock the doors to development then it needs to be part of an integrated, multi-sector, holistic approach that addresses the needs in a particular situation. Education is a basic human right and yet for many people in the world, simply surviving the day is far more important. In Maslow's hierarchy of human needs (Blandford 1997:30), basic food, shelter and personal security are seen as fundamental. You cannot educate hungry and malnourished children or encourage the poor to reduce environmental degradation. They will not be found in a classroom but out on the streets begging for food, in a sweatshop earning money, or out in the forest cutting the trees needed to keep themselves and their family alive for another day. As well as not being able to solve development's larger problems, they themselves will not be receiving the right nutrients for proper mental as well as physical development.

The relationship of education to other development issues represents a large topic that would be worthy of a study all on its own. It is, therefore, far too large a topic to do justice to in this particular work. In order to illustrate the thesis that education is key in unlocking the doors to development, we will, therefore, limit the study to a number of specific case studies showing the links between education and other forms of development. When placing education alongside these other development issues we need to consider both how they influence education and the ways education can influence them. Firstly, we will look at a 1985 study done by the American University of Beirut (AUB) in Lebanon in the midst of the Lebanese war of the effects of war on children. Next, a study of the importance of education in the development of the state of Kerala in South India. Then we will study the importance of health education and school feeding programmes. Successful education programmes for the poor that are combined with such health and feeding programmes can meet people's basic needs and achieve several development objectives at the same time. This section concludes with a case study of a school-feeding programme in Lebanon that the author was involved in designing and implementing.

### Education and the Influence of War.

One of the most basic issues for people is that of personal security. Many people live in situations of semi-continuous war where shelter and their personal safety are at risk. It is the author's personal experience in the Middle East that it is very difficult to teach, let alone learn,

when the windows of the classroom are rattling from the sonic booms of fighter jets and after-shocks of explosions. It is difficult to contemplate the intricacies of sustainable development when you don't know if there will be class tomorrow or indeed if the school buildings will still be standing.

When malnourishment is combined with war, the effects can be compounded. In 1985 a study entitled 'The Status of Children in Lebanon' (AUB 1985) was conducted in the midst of the Lebanese War. There were the obvious results of war like the number of children with missing limbs or living as orphans. Part of the survey, however, looked at the mental health of children immediately following the 1982 Israeli invasion. 'One out of every seven children in the Capital [Beirut] presented with mental symptoms and behavioural disturbances during the summer of 1982 [which] sets the tone for more chronic manifestations of psychosocial disturbances.'(AUB 1985:302). It was also very significant that proximity to armed conflict, plus a lack of education, reinforced the effects of environmental pollution and poor nutrition. The results showed a significant increase in child mortality rates, the occurrence of chronic ailments, handicapped children, and children with learning difficulties and other mental disorders. Eastwood College, Beirut, where the author is the Director for Development, has a large special needs unit. In the early 1990s directly following the war many of the children with chronic problems had spent months of their early childhood sheltering from shells and air-raids without proper nutrition or fresh air. One boy simply hadn't spoken before he was 5 years old. The educational behaviours of such children and in fact, even many of the ingrained behaviours of teachers, can be seen as a direct result of the effects of living through 17 years of war.

Educational solutions for situations like Lebanon need to take into account the fears and realities of those living in the situation. The lack of commitment of staff to a two-year curriculum planning exercise, or of administrators to making 5 year strategic plans, have roots in a reality of insecurity and uncertainty. The desire of parents and students for a simple pass rather than striving after excellence has its roots in the short term goals of survival in a region where war is a daily possibility. Educational planning needs to be done in concert with long term security arrangements and rebuilding. There is also a need for understanding and patience in these sorts of circumstances and a genuine desire to meet people at their point of need, whether that be physical, educational, or psychological. For education to be the key to development it needs to be a tool that people can use to transform their lives and circumstances.

## The Relationship of Education to other Development Issues in Kerala, India

The state of Kerala is located in the southwest of the Indian subcontinent. It is one of India's poorest states but is very high in other social indicators such as school enrolments and literacy rates. Veron cites India's 1991 Census and other sources in pointing out that:

*'Kerala's life expectancy of 72years, infant-mortality rates of 13per 1,000 live births, and literacy rates of 91% follow only slightly behind those of industrialised countries. Apart from being important for gender equality, the inclusion of women in education appears to have had a positive influence on children's health and fertility rates. Furthermore, formal education has contributed to higher social mobility of low-caste people and better opportunities for migration.... Kerala's unique development pattern and its outstanding accomplishments, achieved with little foreign aid, have gained respect in International circles. This kind of development through public action has become known as the "Kerala model of development"' (Veron 2001:605)*

Kerala, however, is not a place without problems. The advances in the social field achieved often through aggressive social and educational programmes have failed to spur economic development in the state. Its failings include industrial backwardness, agricultural stagnation, massive educated unemployment, persistent poverty, and a rising suicide rate amongst the young. (Prakash 1994). The result of Kerala's economic stagnation is

*'an increasing scarcity of financial resources to pay for costly welfare schemes.... The fiscal crisis together with the underdevelopment of productive sectors, and high reliance on Gulf money have threatened the sustainability of the old Kerala model with its redistribute policies and radical reforms.'* (Veron 2001:606)

While this may seem rather contradictory, what Kerala does have is its human capital in the form of a very highly educated and skilled workforce. They hold the keys and can form the basis of a new model of development, what Veron (2001:601) calls 'the "new" Kerala model' One of the central aspects of this new model was the decision by the Kerala State government in August 1996 to allocate 35-40% of its annual budget for new development plans to projects designated by local bodies themselves. This has resulted in mixed success with the most successful projects being ones where local action has been integrated into larger sectorial projects. Veron concludes that it is 'premature to draw conclusions about the success of the new Kerala model, but this participatory development model may well provide more lessons.' He points out that if it is to be applied in wider contexts realisation needs to be made that 'Community- based sustainable development meets very conducive social conditions in Kerala. The population – in cities, towns and villages alike – is educated, informed, politically conscious and well organised to bring about necessary far-reaching social change.' (Veron 2001:614)

We need not limit the study to Kerala in looking for examples of the impact of education on other development indicators. Education is important in meeting higher order needs and is seen as the 'prime mechanism for social mobility' (Gould 1993:17). Schumaker (1974:64) described education as 'the greatest resource' and World Bank figures show that four years of schooling enhances a farmer's output by as much as 10% when compared to uneducated farmers in the same area (Colclough 1982:177). There is a clear relationship between the education of women and fertility and child mortality rates. The 'World Fertility Survey' showed a definite relationship (Freedman 1987:784) between years of education and family size with over seven years of education resulting in the lowest rates. We can say with a great deal of certainty that education is a key factor and significantly affects other development indicators. In the next section we will look at how this can be applied through the specific linking of education, health education, and food in school feeding programmes.

### Health Education and School Feeding Programmes

There is ample evidence that there is a direct link between nutrition and physical and cognitive development. Surveys of general population statistics and direct observation confirm these ideas. There are also detailed and academically rigorous studies linking nutrition to physical and mental development. Measuring the direct effects of school feeding programmes is, however, inherently more difficult. Scientific rigour requires controlling all factors except the one being tested, but there are social and ethical concerns that forbid the feeding of some children in a class and not others. It is also difficult to control for unobserved factors such as the way such attention affects the attitudes and behaviours of children and their parents. For example, at Eastwood College in Lebanon the Captain Mike School Milk Project, outlined below, has been implemented with elementary children. When the author asked a middle school class if they would like to participate 7 out of the 20 children enthusiastically responded. Six of those students were the top students in the class and all seven have overseas exposure and would have strong parental support to participate in such a programme. A study of cognitive development and school milk with such students would, therefore, produce unrealistically high results. The section below, however, does cite a number of scientifically rigorous studies that show a direct and positive correlation between school feeding programmes and factors like physical growth, cognitive development, results in standardised tests, school attendance, attention spans, and classroom behaviour. The best results are achieved, however, when school feeding is treated in the context of improvement of other educational and socio-economic factors at the same time. The result is better-educated and more productive young adults who can unlock the doors to their own development and that of their nations.

This sort of analysis is particularly important in light of rapidly changing eating habits in both developed and developing countries. Even in very poor societies children and parents often opt for consumer goods, which have high status but offer little in the way of nutrition. Food reflects the changes in family relationships, in consumption patterns, and the increasing influence of the foodstuff industry in society. There is a need for health education on the importance of good nutrition for children's physical and mental development. Health education and school feeding programmes provide an excellent example of how the needs of development can be integrated in a holistic approach that can have many benefits. First and foremost, the children's nutritional needs are met so that they can grow in a healthy way, both mentally and physically. For poor families this can also remove some of the financial burden of sending children to school and can be an added incentive for children to be on time and regular in attendance. The improvement in child health can relieve the health services of a country and having healthy children at school can free adults to seek productive work. This is particularly true in developing countries where the majority of child illness and death is as a direct result of the preventable causes of malnutrition and dysentery. As well as the direct human cost there are the more indirect costs involved in parents or older siblings having to devote large amounts of time caring for such children. If these programmes are directed to the most needy they can have a significant effect and simultaneously achieve several developmental objectives.

Directing these programmes at children is particularly important because the foundations for healthy nutritional habits are laid early in a person's life and tends to be followed through to adulthood. Childhood is also the time of rapid physical development both in body and brain. The positive relationship between nutrition and the physical development of children has been extensively studied throughout the world. Batrouni, Perez, and Gonzalez de Cos'lo (1985) studied the effect on preschool children in South America. Muzzo, Leiva & Zvaighaft (1985) showed the direct relationship between height and nutritional status for children in Chile. Lahmann, Scgelp, Changbumrung, Egoramaiphol, and Feldheim (1985) showed the positive effects of nutrition on school children in two regions of Thailand. Brenden, Kumar and Bshiveh (1884) compared the nutritional status and socio-economic background of Libyan primary children. In Lebanon there is a tendency for school children to drink Colas, which are actually cheaper than drinking water. The result of this is bone and teeth decalcification and malnutrition. A study of 400 Lebanese children between ages 6 – 9 showed that as a result of poor nutrition, 78% of the children attending government schools and 12.5% of the children in private schools were below the National Centre for Health Statistic Standards (NCHS) for height and weight. (Baba, N., Hamadeh, S. & Adra, N. 1991:186).

Scientific studies of the relationship between good nutrition and cognitive factors are more difficult to substantiate as a variety of factors may contribute to the result. A number of very rigorous studies have been carried out in Jamaica on the relationship between school feeding programmes and cognitive factors. In one study of school feeding in Jamaica, Simeon (1998:790S) found that 'After one semester, the class receiving the meal showed improved arithmetic scores and school attendance compared with the control group.' In another study Grantham-McGregor, Chang and Walker (1998:785S) 'showed that providing breakfast to students at school improved cognitive functions.' They found that when undernourished children were compared with a control group and given a battery of cognitive function tests they 'performed better after they received breakfast ( $t=3.11$ ,  $P<0.01$ ).' These tests included 'visual search, digit-span forwards, categorical fluency and speed of decision making.' In a crossover study where the same students were compared with themselves after being given or not given breakfast they 'showed that missing breakfast detrimentally affected the cognitive function of under-nourished children.' (Grantham-McGregor et. al. 1998:787S).

They found, however, that the results for student behaviour depended more upon the school conditions than the breakfast programme. In a school, which had been recently built to the specifications of an international agency and where every child had their own desk and chair, children talking, fidgeting, moving, and attention given during instruction improved as a result of eating breakfast. In the more crowded poorer resourced schools they found 'in contrast, the children's behaviour in two of other schools actually deteriorated after they received breakfast; they paid less attention to set tasks and talked more in class.' (Grantham-McGregor et. al. 1998:788S). If the children continued to be fed without improvement in other factors this could in the long run result in poorer academic results rather than better. This highlights the need for a holistic approach to education and development.

The United States Department of Agriculture (USDA) oversees the largest school breakfast programme in the world. 'In 1995, the programme was serving  $\approx$  6.3 million children in 64,000 schools' (Kennedy & Davis 1998: 798S). They found that with an increasing percentage of mothers working outside the home the number of meals consumed at home has decreased. They also found that: 'Those who are more likely to participate include those from low-income households, those in younger grades' (Kennedy & Davis 1998:799S). In one study of six elementary schools in Lawrence, MA, school attendance and academic achievement were monitored. In the baseline survey participants scored lower than non-participants. They were then given 'Comprehensive Tests of Basic Skills (CTBS) in two time periods: before and after school breakfast. They also monitored absenteeism and tardiness.' What they found is that 'their scores increased significantly more than those of the non-participants.' They also found

that 'both tardiness and absenteeism rates improved with programme participation.' (Kennedy & Davis 1998:799S).

Moock and Leslie studied the relationship of childhood malnutrition and schooling in the Terai (plains connected to India) region of Nepal. They state that their results:

*'add to the growing evidence suggesting that efforts to improve child nutrition status may have educational benefits as well as survival and health benefits. If the economic benefits of improving nutritional status can be legitimately calculated to include the higher productivity of a more educated adult population... as well as the treatment savings from a better nourished, less disease-prone child population, it may turn out that an investment in child nutrition is one of the best investments a developing country can make.'* (Moock and Leslie 1986:49)

In a very well documented study on the impact of health and nutrition on education Behrman points out the strong 'associations between health and nutrition on the one hand and education on the other.' He points out though that 'such *associations* do not necessarily imply *causality*.' (Behrman 1996:23). The problem is that health, nutrition and education are not independent, randomly determined factors. Parents who are concerned for their children will be simultaneously concerned about all three. Behrman (1996:24) points out that 'policy makers and analysts cannot observe, [factors] such as innate ability, motivation, genetic robustness, and the environment.' Keeping these qualifications in mind Behrman then goes on to survey a number of studies of the relationship of health and nutrition on schooling. These include studies done in India and Indonesia 'assessing the effect of iron deficiency on children's cognitive development and school performance [which] found that iron supplements had significant positive effects on children who were initially anaemic. Another study in Thailand 'researchers found significant positive associations between iron status and both ability and cognitive achievement.' A study in Natal, South Africa on the effects of parasitic whipworm (*Trichuris trichiura*) 'results were consistent with the hypothesis that parasitic infections combine with nutritional deficits to impair cognitive development. (Behrman 1996:27). In another study 'thirty-four rural Mexican children who were followed from birth through age nine, the half who received supplementary food generally performed significantly better on school tests, were more active in the classroom, and interacted more positively with their classmates than did the control group. (Behrman 1996:28). He then sites three studies where this impact on cognitive achievement has been tracked into improved productivity and wages for people in developing countries with the improvement translating into an improvement of 13-22 percent increase in wages. (see Boissiere, Knight and Sabot (1985); Glewwe (1994); and Alderman et. al. all cited in Behrman 1996:32). Behrman (1996:33) concludes by saying that:

*'The evidence suggests that better health and nutrition may pay off in terms of economic growth as well as equity concerns by improving the educational performance of poor people in the developing world.'*

School feeding programmes can enhance sustainable development through the improvement of health, nutritional status, and the education of school age children. The following case study is of a school milk programme in Lebanon that is currently running and supplying milk to over 7500 children. The latest findings show that the body needs more calcium than was previously believed. 'An increase from 800mg to 1,600mg per day among younger children has been proved to result in greater bone mass' (Tetra Pak 1997:27). The author acted as an educational and development consultant on this project during the planning and initial implementation phases. He also wrote the educational material on health, nutrition, environment, and financial management that are supplied free to the schools along with the milk. It is presented as an example of how nutritional, educational, and environmental issues can be dealt with in a holistic approach. It is also an example of how the interests of private enterprise can be drawn upon to fund educational and development projects.

### **The Captain Mike School Milk Project**

The Captain Mike School Milk Project is an attempt to meet some of the educational and nutritional needs of children in the Middle East. The project has three main components. The first is the distribution of school milk under the banner of The Captain Mike School Milk Project. The project delivers this at cost to private schools (US \$25 per child for school milk every day for a year) and free to children in government schools and orphanages. The educational aspect of the project is happening by distributing free lesson material on health, nutrition, environment, and financial planning. The author of this paper developed the materials writing them for elementary and middle school children. A sample lesson is included in the Appendix 2. Along with the lessons the schools are supplied with a teacher's manual explaining how to use the materials and linking them to the relevant aspects of the Lebanese National Curriculum. The lessons are presented in a ready to use format with games, puzzles and activities so that teachers can use them with minimum preparation. The third aspect of the project is an awareness campaign with public meetings in schools on topics like osteoporosis and nutrition, plus various competitions.

The project was the initiative of Tetra Pak, a multinational packaging company that has a budget for community service projects. This project is an attempt to create a win-win situation where the needs of the children, the development needs of the country, and the needs of the companies are met. The project is promoted with the use of a character called Captain

Mike who is on all the literature. A costume has also been made so that a real live Captain Mike can visit elementary schools promoting the programme. The project attempts to take a holistic approach by linking the nutritional aspect of school milk distribution to an educational initiative concerning the environment, social, and economic issues.

The project serves to illustrate a number of issues that are relevant to this paper. Firstly, the nutrition issues. The milk being supplied meets about 25% of the children's vitamin and mineral needs. In particular it is rich in iron and calcium that are deficient in the diet of many children in Lebanon. It also encourages a milk drinking culture that currently does not exist in Lebanon. Unlike countries like New Zealand, milk is not a household product. Where milk is needed in the home, powdered milk or some other non-dairy substitute is used. The major dairy product consumed in the country is yoghurt (*laban*) or drained yoghurt that is used like butter (*labne*). As mentioned earlier there are significant health issues for children in Lebanon. World Health has identified schools in the recently liberated (from Israel) region in the south of the country and also 60 most needy schools where children are significantly undernourished. The initial aim of the project once it had moved beyond the initial phase was to supply free milk to these schools and thus meet the needs of the most needy.

The second issue involves the economic aspects. Developing a culture of drinking fresh milk has significant advantages for the local dairy and packaging industry. This has meant they have enthusiastically embraced the project by underwriting its initial costs and committing themselves to contributing a percentage of their normal fresh milk sales to the project. All the initial development costs were met by the sponsoring organisations. These were: Tetra Pak, a multinational packaging company that bore the main bulk of the initial funding; two local dairy companies DairiDay and Liban Lait who supplied the milk at cost, packaging and delivering it using their existing networks without charge; and Credit Libanaise, a local bank that covered the costs of all the educational materials and the school banking programme. As part of the project, contributing companies were allowed to display a Captain Mike sticker on their milk products. In return they contribute fifty Lebanese lira (approximately three US cents) to the project for every package they put a Captain Mike sticker on. As brand awareness and sales of locally produced fresh milk grow so will funding for the project, enabling the project to become largely self-funding.

So far the project has been largely implemented in private schools. This has been partially for legal reasons because it requires government approval to implement anything in government schools. The government school system in Lebanon is not very strong. This is a result of the war and constant political interference. The result is that many of the children in Lebanon are

educated in Private Schools. Those schools that agreed to participate in the pilot project were supplied with the school milk at cost and all the educational and other materials free. They then were able to charge the milk to parents. The rate was US \$25 for children to receive the milk. The vast majority of parents were very pleased with this seeing it as very good value for money given that milk in Lebanon costs over a US dollar a litre. The rate included a small margin that the school could use to supply milk to sponsor needy children within the school or to sponsor another smaller school. For example, the school where the author works, Eastwood College, sponsored a local orphanage school so that all those children could receive free school milk.

A third aspect worth considering with this project is the relationship between private industry and government and non-government organisations. Some initial sponsorship has been achieved for specific schools through the local Rotary Clubs. If the project is to expand to a national level, however, it will require much more significant government and international funding. The literature of organisations like UN contains ample rhetoric of the way in which development agencies and private industry can work together but the reality the author has experienced is somewhat different. Private industry is suspicious of governments and UN Agencies seeing them as large bureaucracies that soak up endless funds and take an inordinate amount of time to implement anything. The government and non-government agencies on the other hand, view private industry with suspicion seeing everything as a marketing ploy and are, therefore, reluctant to associate themselves with such a project. In the case of the Captain Mike Project it took some time to be granted permission to distribute the educational materials and free milk in government schools.

A project like Captain Mike has the potential to achieve a number of development objectives. There are the direct advantages to the children, especially those who are malnourished, in the form of physical and mental development. The educational materials and public meetings should encourage greater awareness of the importance of good nutrition in young children. Some of the exercises are designed to be done at home with parents so that they become more aware of nutritional information given on packaging.

Another advantage is the Young Bankers Programme supplied along with the project. It is designed to encourage better budgeting and the use of bank savings accounts. Before this project there were no child bank accounts in the country. Many people also do not trust the banks because the currency collapsed during the war from Lebanese Lira LL8 to the dollar to currently LL1,508 to the dollar. The result is a culture where people spend and consume and do not put their money into banks or long-term investments. The project empowers children to

go to the bank even if their parents are reluctant and encourages them to save for things and to think of borrowing as something you do to make an investment in property or a micro-business.

Indirect advantages of the project could include encouraging the growth of the local dairy/agro industry with the subsequent creation of work and employment for locals. Eventually this should result in lower milk costs for consumers and increased opportunities for employment of young graduates from the university agricultural and food programmes. As well as encouraging good nutrition the project encourages environmental awareness. The packaging used for the Captain Mike milk is from sustainable forests and is theoretically recyclable. Visits to local recycling plants is included as part of the educational programme.

The pilot phase of the project had been successfully implemented in Lebanon with over 7500 children. The Lebanese Ministry of Education has approved the programme so that the materials can be distributed in government schools. Investigations are also currently being carried out to consider implementing the project in Jordan and the West Bank with the possible backing of USAID. Details of the project and the most recent developments can be found on the project's Web Site: <http://www.school-milk.com>

Real life projects in developing countries inevitably have to deal with many problems simultaneously. They have to design pragmatic solutions to real and immediate problems of people at that point in time. One of the advantages of projects and solutions that are centred around education is that even though mistakes will be made and the project may have shortcomings many will be helped at the same time. They are then healthier, better educated, and empowered to go out and solve problems. Education that is empowering does not design solutions for people. Rather it takes them where they are at and helps move them on to the next step so that they are enabled and empowered to help themselves and help others. In the next section we will look at how non-formal forms of education can not only make education more widely available, but also by its very nature, tends to provide education that is more appropriate and relevant than formal education.

## Chapter 6 Education Without Walls

Education that unlocks the doors to development is education that is relevant and available throughout life. If this sort of *Education for All* is to be achieved, then even in the richest countries it cannot be limited to formal education programmes. While formal education and qualifications will always be important, what is most important is what is learned.

Unfortunately much of what has been done in the area of education and development so far in the world has been limited to formal education. What needs to be realised is that learning how to learn and being able to access and use appropriate information is more important than the teaching of a particular curriculum or a particular methodology of teaching. We live in a world where there is an explosion of information. Life long learning and non-formal forms of education should not be seen as the opposite of all that formal education stands for. Rather they represent a positive approach to learning that stands in its own right. They can include things like adult education, literacy campaigns, continuing education, on the job training, accelerated training, farmer or worker training, apprenticeships, extension services, distance education, and open learning.

Education that transforms people's lives and unlocks the doors to development needs to be placed in a far broader context and have far more relevant content than what is currently taught in schoolrooms and with blackboards. The quantitative realities and qualitative needs of millions of poor and uneducated people demands far more innovative thinking. If people are to unlock the doors to their own and their nation's development then they need an education that is accessible, relevant, appropriate, and available throughout their lives. This requires forms of education that are without walls in terms of the age range, content, and physical location.

Education that transforms the lives of people is not simply the transfer of knowledge and information. It should build people's confidence so they can experiment and problem solve. As Maxwell puts it, there needs to be a shift from a philosophy of knowledge to one of wisdom 'learning how to live, learning how to see, to experience, to participate in and create what is of value in existence.' (Maxwell 1984:66). 'Development is about processes of enrichment, empowerment, and participation.' (Edwards 1996:120). Education that serves these needs will be more concerned about raising levels of skills and competence than academic qualifications.

Article 1, Paragraph 1 of The World Declaration of Education for All states that the purpose of education is that:

*'Every person – child, youth and adult – shall be able to benefit from educational opportunities designed to meet their basic learning needs.'* It then goes on to define these needs as the learning tools and content *'required by human beings to survive, to develop their full capacities, to live and work with dignity, to*

*participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning.* (UNESCO 2000c:75).

The International Commission on the Development of Education, known as the Faure Commission, found that for many countries the

*'quantitative expansion of their education systems did not go hand in hand with efficient educational action. Enormous financial and human resources were laid out to develop costly school models, the results of which often fell far short of expectations. Linear expansion strategies can no longer be justified...When an education system has to absorb huge numbers of children, strategies must be modified, must move from the quantitative to the qualitative, from imitation and reproduction to a search for innovations, from a uniform procedure to diverse alternatives.'* (Faure et. al 1972:173-174).

This does not mean that formal systems should be completely replaced. The Faure Commission saw that many non-formal forms are just as much in need of reform as the formal system. They suggest a

*'dialectical approach comprising, on the one hand, improvements to be made to existing systems and, on the other, alternatives to these.'* Rather than stressing methodology they feel the stress should be laid *'on two fundamental ideas: lifelong education and the learning society.'* (Faure et. al. 1972:xxxiii).

Formal education is often cumbersome and expensive. Some western educators would go as far as saying that western societies have gone overboard with the whole view of education; building society on the basis of schools rather than what is the best way for humans to learn. More radical views such as those of Ivan Illich would suggest *'Deschooling Society'*. For Illich the current trend *'must be reversed in the search for their institutional inverse'* (Illich 1976:7). Too often education and whole communities are built around the needs of the global economy rather than what is rational and healthy for those living in those communities. Building a better world may have to begin with building better ways of learning.

In a recent book called *The Unfinished Revolution*, John Abbott and Terry Ryan say that modern research on how the brain actually functions suggests that the industrial model of education, followed in most formal education systems, is not the best way for people to learn. They dedicate the book *'to all those who know that the current structures of formal education are fundamentally flawed and who wish, with all their hearts and minds, to rectify this.'* (Abbott & Ryan 2001:1). They cite recent brain imaging technologies that *'reveal the brain as a flexible, self-adjusting biological system which grows and reshapes itself in response to challenges and withers through lack of use.'* (Abbot & Ryan 2001:7) They would advocate *'a constructivist and apprenticeship-based approach to learning'* (Abbot & Ryan 2001:5) claiming that this is much more in keeping with this recent brain-based research on how people learn. A recent OECD (1998:5) report on educational policy suggests similar ideas when it argues that, *'A lifelong learning approach calls for a sweeping shift in orientation, from institutions, schools*

and programmes to learners and learning.’ Education that empowers people to unlock the doors to development is more than content. It is education that develops skills and abilities such as the ability to communicate, work in teams, adapt to change, to innovate, and be creative.

Abbot & Ryan’s also speaks in terms of creating learning communities where the resources of the entire community are used in an apprenticeship approach to learning. In this model the community as well as the individual learners would be in a constant process of life-long learning. As they put it:

*‘Learning communities would have as their first priority the strengthening of families, and providing for the learning needs of all their young people. All available resources, both formal and informal, would be used towards the goal of helping children becoming responsible adults who know how to function successfully within the community. Learning would no longer simply be bound to the walls of a single institution. Rather, it would be seen as a total community responsibility’ (Abbot & Ryan 2001:218).*

Seeing education in this way means that lifelong learning does not become some sort of semi-continuous classroom experience. Rather it is as Coombs (1973:290) puts it, a ‘flexible and diversified range of useful learning options’ that are available throughout life and are complementary and reinforcing. Once education is seen in these terms then when the Jomtein Declaration speaks of ‘basic learning needs’ (UNESCO 2000a: 75) these can be thought of as analogous to minimum nutritional needs. Education becomes more about being prepared with appropriate skills and attitudes and given the accessibility rather than it is about ploughing through massive, irrelevant curriculum. If education is seen in this way there is no reason it has to happen in a certain way at certain hours or at certain times of the year. It opens up the possibility for educational innovations that are centred on the learner and their needs, rather than upon teacher and institutional needs. It also shows that the target areas for international funding should be focused on younger children when the predisposition to learning and motivation for learning are being established. The focus of international assistance funding needs to move away from scholarship programmes at a university level to funding at pre-school and primary levels for children and functional literacy and numeracy for adults. This is now becoming widely recognised by funding organisations. For example in the Review of the NZODA one of its conclusions was:

*‘Over 40% of the NZODA bilateral budget, a total of \$60million, is allocated to education and training. Approximately 90% of this funds tertiary education scholarships, of which approximately 85% is provided in New Zealand. This is despite the fact that internationally, there is a strong recognition that supporting basic education should be a prime objective, and that other leading aid agencies have stopped giving scholarships because of their uncertain link to development outcomes.’ (NZODA 2001:90).*

The meeting of basic learning needs should be directed at the primary level and at those who are illiterate. These are the major target groups of the EFA Movement. Once people have had their basic learning needs met there is a need to provide them with a variety of other learning opportunities. These do not need to be capital intensive or geographically specific. They can use distance education methods and make full use of modern technologies and media.

Motivation does not need to be provided by having expensive programmes or highflying qualifications but by making the learning opportunities relevant and readily available to those who are ready to receive them.

A major advantage of non-formal and distance forms of education is they are not space or time bound. They, therefore, allow the learners to remain in their context and learn what they need when they need it. They also allow learners to construct their own immediate applications. These forms of education, also, do not require expensive buildings, or well-qualified teachers. People can be trained to help others to use the available resources, acting as facilitators rather than experts. As a result the number and variety of educational opportunities of the geographically, culturally, and financially disadvantaged can be significantly expanded, without over-extending already strained educational budgets. This presents a far more achievable model for achieving *Education for All* than that of playing a never-ending game of catch-up trying to follow the current western model of education.

In the book '*Distance teaching for the third world. The lion and the clockwork mouse*' the authors portray distance teaching like the mouse that can gnaw away at the ropes of the Lion of the orthodox education system. (Young 1980). Distance Education can reach beyond geographical, sociological, cultural, and political barriers. It couples powerful information and attitude changing techniques with educational technology. Singh, commenting on education in India, sees that distance education 'has the greatest social justification and needs full support for future development.' (in Ortner ed. 1992:242). As outlined earlier in Chapter 5, women's education can have a significant effect on fertility rates and child mortality. Not only can non-formal forms of education solve educational problems but also they have the potential to gnaw away at the knots of some of the world's largest development problems.

In the 1994 'International Adult Literacy Survey' (OECD 1995:116) of seven countries it was found that 'Literacy is strongly correlated with life chances and use of opportunities.' What is interesting is that the survey also found that 'Literacy is not synonymous with educational attainment'. While people with more formal education on average tended to have better literacy this was not always the case. 'The implication is that schooling provides no more than

a “start in life” when it comes to acquiring literacy skills, and it appears to provide a more effective start in some countries than in others’ (OECD 1995:116).

Giving people access to lifelong learning opportunities means they reach out for the tools they need to design their own solutions for development. Barriers of class or caste do not stop distance education. It can cross these as easily as it can cross oceans. The direct link between education and development can be seen in the developing world where people are not empowered to act as a direct result of high illiteracy. Lack of education means people lack many of the needed skills for economic and sociological development; they are also denied access to up to date information; they may not see the value of thinking critically in their situation; and may not have developed co-operative learning and other participatory skills.

There are a number of factors that can stand in the way of people obtaining the education they need. Those living in rural areas often live far from schools and the demands of subsistence living mean they cannot take time out for education. Much of the attrition by young children in these situations can be accounted for on the basis of the opportunity cost of education. The children are needed for other tasks such as tending animals and watching fields. As a result they cannot stay in a formal school setting but if they were available they could use non-formal methods and educational materials supplemented by tutorials or block courses in off peak seasons. As seen in the previous chapter wars can disadvantage also prevent children of even wealthy people from attending school. Many of the learning gaps of children and adults in Lebanon may be attributed to years of interrupted schooling and lives caused by a civil war. Good distance educational materials could have been widely used by families that spent many hours and days in air raid shelters and basements of buildings.

Another factor can be the design of the programmes themselves. It is important in designing non-formal education systems to remain centred upon the needs of the learner. Too often when people speak of information technologies like radio, television, and the Internet the emphasis is upon the communication tool and not the learner. Agunga makes a plea for a learner centred participatory approach saying that unless those using them ‘also understand development, I am convinced that the impact of these technologies on development will continue to be minimal.’ (Agunga 1997:230)

Those involved in planning such programmes can often be operating on different agendas to those of the learners. Educational planning as a field tends to be controlled by educational economists. They are concerned primarily with things like the percentage of GNP, cost per graduate, relationship between education and manpower, and cost-benefit analysis. Even an

educationalist will have an economic slant with indicators like student numbers, size, pass rates, school numbers, classrooms, labs, and resources. While this information is useful to decision makers it deals primarily with issues of quantity not quality. It also places the emphasis upon formal rather than non-formal solutions to the problem. It tends to have the effect of placing non-formal solutions in the too hard basket.

Another problem for non-formal education, especially in the third world, is that it is often seen as a second rate education. Rogers (1992:27) takes a pessimistic approach in that he feels 'it is and probably will remain a lesser partner in the educational enterprise...under pressure from the formal system. It is in danger of being either formalized (made to look like the formal system) or marginalized.' Gould (1993:66) points out that a programme in Ecuador 'of non-formal education to bring more adults into the national economic system failed to gain the support of the national political elite or of the expected beneficiaries.' To counter this sort of systematic bias the symptoms of inequality must be dealt with at the same time and the quality of the product of such education systems needs to be established before attempting to launch them. A 2001 study of the nine high population countries reached a much more positive conclusion. 'Distance education seems the natural choice for highly populated countries.' (UNESCO 2001:7). Fortunately not everyone considers these sorts of approaches to be too hard. There have been some excellent examples of major impacts where political will and public resources were combined using non-formal means.

Unfortunately on the ground while there is often tremendous policy commitment to many of these ideas by Aid agencies and organisation like EFA, it is difficult to find successful concrete examples of it being implemented in practice. Part of the reason for this may be that they are difficult to organise and their impacts are difficult to measure. Also because they are locally based there is a tendency for them to be temporarily successful until the need is met and then for them to deteriorate. It is, therefore, important to learn from successful examples and to not necessarily see that the time bound success means that the programme did not have a significant impact in the empowerment of individuals in the region.

### Examples of Innovative Approaches to Solving Education Problems.

There are some very good examples of national literacy campaigns. In Nicaragua following the 1979 Revolution there was a 'Nation Crusade for Literacy.' Working full time for six months, secondary and higher education students offered their services to bring literacy to the people. The crusade cost 20million for infrastructure and food for volunteers and involved 120,000

teachers for 600,000 illiterates. 'The results, published in August 1980, indicate that 70percent of those listed as illiterate in 1979 were no longer so' (Lourie 1989:53). While this campaign could not continue due to internal and external pressures including US economic reprisals, Miller concludes that the 'Literacy Crusade contributed significantly to the creation of a new, more equitable social order.'(Miller 1985:129) In Russia before World War II they put literacy on a 'war footing' with one of the largest literacy campaigns in history' (UNESCO 1958:11). In 1897 Russia had 24percent literacy but by 1939 this had risen to 95%. In 1995 the Russia Federation is listed as having 100% literacy for males and 99% literacy for girls. (Bellamy 1998:108).

Distance Education and in-service training techniques are used in teacher training. This can speed up the process of change in schools that are dominated by memorisation of often-irrelevant curriculum material with a 'one best way' (Beeby 1965:72) one-book approach. Beeby's one book approach is similar to Freire's (1993:53) 'banking concept' of education. The problem for developing countries is they have to bring an antiquated education system up to speed and they often have very few resources with which to do it. Beeby stated that the major determining factors in the quality of schools in the Third World and the speed at which they can move to higher stages are 'the level of general education of the teachers' and 'the amount and kind of training they have received' (Beeby 1965:58). Distance education can be used to give teachers in-service training providing them with skill and materials and thus help the system leapfrog the various stages.

One example of this was done in the Palestinian Camps in Lebanon. In 1963, 200,000 Palestinian refugee children at primary and lower secondary levels were being taught by 4648 teachers out of whom only 450 had received teacher training. The United Nations set up an Institute of Education and the teachers were given distance educational materials that covered academic subject matter and teaching methods. They had written assignments due each fortnight that were used as a starting point for seminars organised by 20 field supervisors. The teachers were able to increase their confidence with the subject knowledge; their skills in teaching and at the same time carry on teaching in the classroom. The costs were extremely low; it did not require buildings or other capital outlay. By October 1968 over 90% of the teachers working in the camps were trained. (Lyle cited in Young 1980:28-30).

Young cites a number of other similar projects where distance education was used for teacher training in Africa as part of their efforts to achieve 'universal primary education.' In Kenya radio programmes that the teachers could use with their classes supported the programmes. Surveys reveal that the teachers and their principals noted significant improvements and there

was a visible improvement in classroom performance and pupils' exam results. (Young 1980:30-38). Young cites other examples of using distance education in adult literacy programmes and in agricultural extension programmes.

In the book *Social Justice and Third World Education*, Timothy Scarse sees the issues of social justice, education, and development as being intertwined. He sees them as 'linked to broader social justice imperatives like the full and unhindered opportunity to participate in societies' major institutions.' (Scarse (ed) 1997:xi). He argues 'in support of education for development and social justice in which effective education is that which is relevant to the needs and interests of the population and where there are useful knowledge and skills imparted (Scarse (ed) 1997:xv). Drawing on the work of Freire they conclude that alternative and culturally appropriate forms of 'education can play a significant role in the transformation of underdeveloped societies, and their marginalized populations, towards one where there is more equality and social justice.' (Scarse (ed) 1997:xvii)

In the chapter on Grenada, Anne Hickling-Hudson (Scarse (ed) 1997: 133-161) speaks of the educational experiment that was unfortunately ended with the US invasion of Grenada in 1983. The revolutionary government of Grenada attempted to unpack the effects of colonialism and underdevelopment 'by restructuring the formal and non-formal education systems in a way that would promote the development of the people and serve the needs of an expanded economy.' (Scarse (ed.) 1997:159). At independence from Britain in 1974 the majority of the population, largely peasants and estate labourers received a less than adequate primary education. A small minority received 'an academically imitative British "grammar" schooling' (Scarse (ed) 1997:134) which prepared people for the Civil Services and schools so that the colonial and neo-colonial system could be maintained. This system of education did not encourage economic growth or social development. As Maurice Bishop the leader of the revolutionary government put it, the plight of the majority was 'extreme poverty, high malnutrition, illiteracy, backwardness, superstition... and massive migration. (Bishop 1979:41). The changes were, therefore, designed to 'overcome what they analysed as the economic and psychological dependence that kept Grenada poverty stricken and politically and culturally backward' (Scarse (ed) 1997: 136). Bernard Coard, the Finance and Planning Minister, saw it as a new world requiring a new type of school. 'That is why we believe so strongly in education for all our people in our big and popular school, which is how our comrade leader, Maurice Bishop, sees the whole country, as one big, popular school.' (Speech by Bernard Coard cited in Scarse (ed) 1997:139). Quite naturally, this sort of programme evoked both support from those experiencing oppression and antagonism from those who stood to lose substantial privilege.

The implications of this for education in Grenada meant an overhaul of the system so that it would ensure the viability of a different way of life. This took the form of three overlapping strategies. One was to unite Grenadians in the task of national development through the formation of various national organisations. These mass organisations organised courses and seminars raising their political and economic knowledge and giving them the opportunity to input directly into issues such as the National Budgeting. A second strategy was the 'quantitative and qualitative development of the formal education system.' These two strategies led to a third 'that of refashioning education, the economy, constitutional forms, and culture in Grenada's own image.' (Scarce (ed) 1997:138). The subsequent growth in the economy led to a rapid demand for education and training to 'produce the producers' (Scarce (ed) 1997:139). It also increased the amount of money available for education showing the interrelatedness of education and development. Rather than seeing education in Rostow's terms of preparing the population for economic 'take off', Hickling-Hudson argues that the Grenadian revolution 'saw the importance of the interlocking factors of development.' (Scarce 1997:140) and desired to create an educated and politically aware working class.

In practice the Grenadian Revolution meant things like the production of a curriculum and series of readers that validated the worker-peasant culture, the role of women, and took a modern ESL (English as a Second Language) approach to teaching Creole speakers called the 'Marryshow Readers.' Another was the integration of the school with the community in a 'work-study approach to education.' (Scarce (ed) 1997:142). Apprenticeship, combination of production and study, involvement of skilled people in training students, and developing a Caribbean orientation to the studies were all seen as important. The emphasis was upon young people qualifying themselves for a particular job or career needed in the socio-economic development of Grenada rather than all aiming for higher education and the few inaccessible white collar jobs. For adults there was a system of 'on the job training, usually in the form of six-month vocational courses.' (Scarce (ed) 1997:146). This included courses in tourism, craft working, farming, fishing, production, management, and entrepreneurial enterprises. A literacy campaign involving 1,575 volunteers each undertaking responsibility to teach one other person to read and write led to thousands of illiterates receiving an education in their homes. This sort of mass mobilization significantly cuts the cost of educating large numbers and develops attitudes of collaboration and teamwork. The results of this sort of education can be seen in very positive terms.

*'People with an education seem to display a greater willingness and ability to participate more actively in the political decision-making process and in community development efforts. Education also increases the predisposition of the population to try out new ideas and practices such as improved health practices, family planning and the introduction of new crops and cultivation techniques.'* (Bacchus 1981:221)

Unfortunately for Grenada the speed of change did not suit everyone resulting in a fatal conflict in the political leadership, the invasion by the Americans and subsequent 'aid' aimed at erasing all memories of the revolution. It is a pity the educational experiment met with such western political resistance, as there are many lessons that could have been learned if the programme was allowed to mature and develop.

A paper this size could be filled with many examples of educational innovations. There is much that can be learned from real experiences of non-formal forms of education in the developing world. These innovations show that there are cost effective and educationally sound alternatives to the colonially based, western orientated model of education. These alternatives are born in the midst of problems of geographical isolation, lack of resources, poor postal and other delivery systems, and a post colonial attitude in the developing world that these sorts of education are somehow second rate. There needs to be greater awareness of and input given to these local solutions. By supporting them as part of a global strategy then people can be empowered within their local situation to effect real change. The following case study is of a locally developed distance education programme in Pune, India in which the author was involved from 1989-1994.

### **Case Study of Distance Education in India**

The final case study is of a Distance Education Programme in India that prepares students for a Bachelor of Divinity Degree (BD). The programme is part of a broader field of Theological Distance Education known as Theological Education by Extension (TEE) that was first developed in South and Central America. It grew out of educational work done amongst tribal people there and it has spread throughout the Third World. This particular programme is run by Union Biblical Seminary whose Distance Education Department started in 1978. The B.D. programme averages around 200 students. There is also a Bachelor of Theology in Hindi and Marathi offered and various other non-degree courses. The BD programme 'is aimed at providing maximum learning experiences through the integration of study with life' (Keikung 1988:86).

While this is a rather small programme it has a number of features associated with the ideas of lifelong learning. What was particularly impressive to the author was the quality and dedication of many of the participants. Many were reasonably well educated but had chosen to give up well-paid jobs to work in remote villages and areas of India. Not only was their dedication to those they were working with impressive but the fact that they had decided to

continue their own studies, often in very difficult situations. The BD programme is designed for people 'already involved in some kind of Christian service' who 'now wish to broaden and deepen their knowledge and to be equipped further' (UBS Prospectus: 3). The dedication to life-long improvement and facilitating the growth and development of others was much more important than any shortcomings of the programme and illustrates the way in which education can empower people to unlock the doors to their own and others' development.

This particular course has six different types of activities that the student is involved in. Firstly, 24 self-study courses that include the content of the course, questions and exercises, prescribed readings, and assignments. Each course takes approximately 10 hours per week for twelve weeks. Secondly, there are tutorial sessions. Students meet three times per course with their tutors to: clarify questions; discuss the subject and its relationship to life and ministry; to discuss certain assignments; interact with fellow students and reflect on their ministry. Thirdly, there is a portfolio for reflections and practical applications. Fourthly, four Residential Sessions that provide an opportunity for: interaction with other students and exposure to a variety of cultural and denominational backgrounds; meeting with teachers and subject specialists; special lectures; seminars and the use of the Library. The fifth is examinations, and the sixth, the writing of a research paper, that encourages students to analyse, research, and think critically.

The UBS extension materials are very good, written by some of the top theologians and internationally known authors. This illustrates one of the major advantages of Distance Education. To set up a highly specialized course of 200 students spread across a sub-continent that combined the skills of internationally renowned experts with local knowledge experts would simply not be feasible. Not only would the economic costs be enormous but also the opportunity cost to both the students and the international and national experts would mean they would not be willing to make the commitment. Not only are Distance Education and other non-formal methods cost effective but also they create openings that simply do not exist otherwise.

### **Student Response to the UBS Extension Programme**

The following analysis is based on a survey sent out to 200 BD Distance Education students studying at UBS in 1993. A copy of the survey with the results can be found in Appendix 3. Because the students are all over India the survey was conducted by post. This did mean limitations that must be taken into account. Firstly, it meant a one-page format because long surveys tend to have a low response rate in postal surveys. Secondly, as with all surveys we

only have the results of those who replied who are likely to be more highly motivated students. Thirdly, Questions 5, 6, 8 & 9 were questions that students were able to mark one or more responses. In any analysis one cannot consider a non-response to a particular option as the same as a No in a Yes/No type question. It does, however, give a good indication of those areas students felt strongly about. I received responses from 55% of the BD students, representing a very good sample. Bearing in mind the above limitations, the results proved to be statistically significant and it is possible to make some definitive conclusions from the survey.

The first thing to note from the results was the type of student who participates in an adult Distance Education degree programme. Of the students surveyed 78% are in the 31 - 50 age group, 92% were married, and 64% had other degrees. By comparison a quick show of hands in a class for residential BD students revealed only one person over thirty and that the group was mainly single men in the 20 - 25 age group. Amongst the distance education students none were in the 20 - 25 age group and only 6% were in the 25 -30 age group. Non-formal methods of education allow adults to add value to their lives by continuing their education when work and family commitments would make formal education impossible. What is particularly interesting in this regard is the response to Question 7 where nearly 75% effectively said 'no' to becoming internal students even if someone fully sponsored them. These results agree well with those from surveys of other Distance Education institutions. (Rumble & Harry 1982:215)

Under the question 'Reasons for doing distance education', the most popular choice of the distance education students was use in present work (82%) In a class of fifty, first year residential students not one person replied yes to a similar question. Of the distance education students 72% gave time as the reason for being a distance education student and the most popular response to the question *mark the main advantages for you of being a distance education student* was being able to continue working (78%). Given the size of our sample all of these results are statistically significant and show that distance education students doing degrees are generally mature, family people in the middle of their careers, and actively involved in their communities who wish to receive training to help them in their work right now (82%), as well as in the future. Residential students on the other hand tend to be younger students, often fresh out of school or university who are looking for training so that they can get a job in the future. Because of this difference the type of course and the way in which it is presented and administered needs to be different. All of the above statistics agree well with the assumptions made in most distance education literature. It is interesting to note that personal development was the second most popular reason given for doing distance education.

In the questions asking why students were doing the degree by distance education rather than as internal students there are some interesting results. I personally considered that cost would be a major factor so I asked the question in a number of ways; first directly in Question 6 and then more indirectly in Question 7, by asking if they would become an internal student if someone fully sponsored them. Only 26% said a definite yes to becoming an internal student if someone sponsored them fully and 50% gave a definite no. Cost was listed as a reason for 22% in Question 6 and 28% listed it as one of the main advantages of being a distance education student in Question 8. I did a correlation between Questions 6 and 7 and of those who listed cost as a significant reason for being an external student, 55% also said they would become internal students if sponsored. 27% were uncertain and the remaining 18% said no. I also did a Chi Square analysis on these results and found this result to be statistically significant at the level of 0.001 level, which means it is very significant because there is only a 1 in a 1000 chance of getting this result by chance alone.

We can, therefore, say that for about 75% of UBS distance education students, money is not the primary factor in their decision to be external rather than internal students. Other factors such as not being willing or able to leave their present job (72%), family considerations (58%), and the advantages of being able to learn while still working (44%), were all much stronger reasons. This supports the conclusion that many people who do distance education are already in a job/career or have responsibilities and this combined with the impact on a family of shifting to a college, are by far the most predominant reasons for preferring distance education. They want training to empower them to do the things they are doing better and not to opt out of them for three years. A few people listed personal reasons and these included things like: the flexibility of the programme; being able to adjust it into the usual patterns of life; one person is working with a group in a remote area so it's helpful in his work. Others listed various family considerations.

In line with the above findings the most popular answer to the question of what are the main advantages for you of being a distance education student was being able to continue working (78%). Other answers included flexibility in structuring the programme (44%); quality of materials (32%); cost (28%) and a few put interaction with other distance education students (16%). Most of the personal comments centred on the idea of being able to work with people, be with family, and at the same time study and learn new things. As one person put it 'Being part of real life' or another 'Study at own pace while continuing working.' In fact in Question 13, which states that 'receiving training where I am now keeps me in contact with the needs and opportunities.' 30% agreed and 58% strongly agreed.

Malcolm Knowles (1977:202-211) in a comparison of how children and adults learn points out that adults have a number of developmental tasks to perform and so the 'teachable moment' is determined by these tasks rather than a particular physiological developmental stage. Non-formal education methods mean that a variety of options can be made available to people so that they can access them and be empowered to perform the particular developmental task that is relevant to them at that point in time in their lives. This gives a whole new emphasis and meaning to education placing the emphasis upon the needs of the student and not the course or qualification. Although the UBS course was primarily a course designed to give people a professional qualification it is significant that this was not the primary reason given by the students for doing the course.

Distance Education makes an educational opportunity available to people without them having to make radical changes in their living arrangements. It, therefore, allows them to contextualise what they are learning and find immediate applications. Amongst the advantages listed by students were more immediate gratification; lower costs; reaches more people; students not uprooted; deals with immediate problems student faces in their work; focus on self-discipline in studies; flexible curriculum to meet student needs; immediate application of theory; student met at own educational level and pace, and it makes education more widely available. A major educational advantage is that distance education is a pattern of education that the learner can sustain long after the qualification is completed. In the survey 98 % of people agreed that distance education helps develop a pattern for life-long learning. Most alternative training methods do not teach their students how to sustain their learning once they leave college and are in real life situations.

Non-formal education is not all good news and it does have disadvantages. In the survey students listed things like lack of access to resources and tutors as a problem. They often found little opportunity for interaction with other students, high demands on time and high dropout rates in the first year. A well-developed programme can, however, turn some of these disadvantages into advantages. If non-formal education takes place in a community context where people can share what they are learning there is likely to be a community catalytic effect. Also regular forms of input help to keep students on track. The metaphor of a railway track is useful not least because the many hours spent by the author on trains travelling all over India while working on the course. A railway track has two rails, which could be seen in terms of the teaching and the learning. These are supported and kept together by the sleepers of periodic two-way interaction with tutors or facilitators. If this is done properly the rails remain parallel and there is ample opportunity for two-way communication so that the learners needs are

communicated and contribute to the direction of the course material. Keegan (1986:42) sees distance education as 'two way communication' or Holmberg's (1989:43) famous description of it being a 'guided didactic conversation.' If non-formal education programmes are designed with the learner at the centre and the limitations kept in mind then they can be programmes that truly unlock the doors and empower people to effect their own development.

## Chapter 7 Conclusions

Learning is an integral part of human development enabling us to better understand our world and develop it. Learning together in groups means we can open up each other's minds to infinite possibilities, empowering others, and increasing each other's choices. If we are going to learn together, as human beings, more sustainable ways of living then we need to start by caring about our fellow human beings enough to enable them to have their basic human rights met, and in particular the right to an education. It is the conclusion of this paper that the relationship between education and development can be a synergetic relationship where through education, individuals and groups are given the keys that they can use to develop their own solutions. The lessons of modern businesses and the development movement is that the participation of the local actors is essential if real solutions are going to be found. If they are properly educated and empowered they will be able to take into account all the qualitative, quantitative, historical, and cultural complexities of a particular situation and uses this information to create new and innovative educational models that will lead to sustainable and appropriate improvements for all.

Living and working in the developing world involves being confronted on an almost daily basis with educational and developmental needs. The impact of a world population of over 6 billion continually challenges the ideas of the EFA Movement with goals like Universal Primary Education (UPE) and the eradication of illiteracy. Education, however, is more than just another development objective on an impossible to achieve list. By designing appropriate educational solutions and making them available to all, we trust individuals and groups by empowering them to design solutions to their own developmental needs. Empowering and relevant education is education that starts where people are at with their assumptions and needs. To use Freire's terminology people become conscious of 'the situations that limit them: the limit situations' (Freire 1993:80) and are empowered to transform those situations. Development then should be seen in terms of justice and empowerment rather than consumerism and wealth. As Michael Edwards puts it, the real goal of development is 'to equip people with skills, confidence, information, and opportunities they need to make their own choices.' (Edwards 1996:86).

As shown in the findings and case studies in this paper education has a significant impact in increasing people's choices and improving a variety of indicators of poverty. It can also be a focus for meeting many needs at once so that people are then mentally and physically prepared for a life-long process of learning and adapting to their circumstances and developmental needs. The Captain Mike School Milk Project and the various studies of school breakfast

programmes in Jamaica, for example, show how nutritional and educational needs can be met at the same time, reinforcing one another and saving money from other sectors such as the health sector. Education that unlocks the doors to an individual's and a nation's development cannot be limited to a brief formal school experience. As shown in the section on education without walls if education is to remain accessible, relevant, appropriate, and available throughout people's lives then it will require forms that are flexible in terms of age range, content, and physical location. Education that transforms the lives of people is not simply the transfer of knowledge and information. It should build people's confidence so they can experiment and problem solve. It should also make full use of the latest findings in how people learn and use the full range of community resources available.

In order for targets like those set by the EFA Movement for 2015 to be achievable they are going to need money, a commitment to innovative solutions, and a willingness to use alternative means of education. Achievement of EFA is also going to require a commitment to more than improving the statistics. It will involve a commitment to people in their situations, facilitating their learning so that they can find the keys to unlock the doors to their own development. Rather than buildings and curriculum designed from afar what will be needed are people who can get alongside those in need and learn with them, helping them uncover the processes needed to develop educational alternatives that are effective and responsive.

Much of the money for education has to come from the governments of the country concerned and so the right political and economic climate needs to be encouraged for this to occur. James Wolfensohn, the President of the World Bank, says that while outside organisations such as World Bank make a generous contribution of about \$2 billion dollars this only represents a drop in the bucket of the estimated \$120 - \$130 billion dollars currently being spent in developing countries on education. 'The funding comes first and foremost from the governments, 74percent, with 3 percent from the outside, and 23 percent coming from the community and other sources provided by the so-called private sector.' (Wolfensohn 2000:2). Governments and communities cannot depend upon the international community to supply the money. They need to be empowered to look within and to seriously question the development and educational agendas set by the developed countries.

Given that the large numbers of uneducated and underdeveloped are in the developing countries they need to be empowered to rewrite the developmental slate. In the neo-liberal framework economic growth and efficiency have replaced the ideas of redistribution and social justice. Structural adjustment programmes have been designed and enforced without checking on the social implications. Often aid is given as military or other forms that the country does not

really need. For example, the recent split in Tony Blair's Cabinet over the sale of a \$40million air defence system to Tanzania. 'The contract has been condemned as a waste of money by the World Bank for a country that has only eight military aircraft and a per capita income of \$250 a year.' (Hencke & Elliot 2001:1). The reason for the dispute was more to do with the safeguarding of 250 jobs on the Isle of Wight than to do with an ethical commitment to development. There is, therefore, a need to help developing countries and local communities to reduce the pressure and impact of these sorts of twists and turns in international foreign policy. This is especially the case when considering SAP and market driven reforms. Those who are not taken into consideration and who suffer the most in these sorts of programmes are the poor and it is basic services such as health and education that are likely to be reduced to save money, not excessive military programmes.

At the same time as this sort of duplicity in first world practices there is a commitment, at least at a policy level, to the ideas of social justice and the environment. The attempt to balance development with these other issues has led to the increased popularity of the idea of sustainable development. As Veron puts it 'the discourse of the 1980s and 1990s has been about how development and environment can be reconciled and how sustainable development can be achieved.' (Veron 2001:603). This is a significant move from the 1960s and 1970s where environmental protection was seen in stark contrast to economic development. The most well known definition was that produced by the WCED: 'Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987:43). While statements such as this and a growing emphasis upon participation and empowerment have changed people's perception of developmental needs they are difficult to turn into reality in real situations. The perception of what is really sustainable development is quite different for those living in absolute poverty to those of first world academics.

Rewriting the development slate may mean placing the emphasis upon locally appropriate sustainable development. While there is a need for wise economic management this may be promoted by encouraging stable governments that place an emphasis upon sustainability, human rights, right of women, capacity building, and holistic approaches to development. Forgiving debt and rewards to encouraging educational spending, rather than SAPs that discourage it, might be a good policy to continue. Also basing all future loans upon social impact and the underlying issues not short term economic, political, or military advantage for first world countries. This would give countries the money they need to design their own educational solutions. At the international level there needs to be a move from policy and political speeches to practice on the ground in developing countries. By empowering local

people through education they are in a better position to influence the direction of development. Real solutions require local people who are able to fully comprehend national and international realities and constraints and relate these to local priorities and needs. Appropriate education will not only empower people to do this but it will also give them the communication tools to project their needs and realities into the international arena.

As well as rewriting the development slate, the developing world also needs to be able to rewrite the educational slate. In many cases this will involve reforming of the formal models as well as coming up with viable non-formal alternatives. For some countries this means breaking out of colonial models of education. For others the massive expenditure that went into education in the decades after WWII led to centralised and bureaucratic systems that have proved unwieldy to maintain and even harder to change. In examining education systems that are appropriate and relevant to developing countries we need to ask questions like: by what authority do schools teach; what do they teach; what should they teach; and what or whose values do they promote? In recent years the move from industrial to knowledge based societies and the realities of globalisation have changed the nature of work and the skills people need to develop. Formal education systems that are expensive, highly centralised, and are based upon a cumbersome industrial model of education are not relevant to most of the world's population. What is needed is not necessarily equality of outcomes but equality of opportunity. This requires new models of education for all that addresses the needs of people; models that are appropriate, relevant, and accessible. Models that facilitate life-long learning and empower people to participate actively in their own development.

As all these demands increase and populations rise rapidly, the expansion of traditional education systems has proved inadequate in meeting needs. Rampant population growth, teacher shortages, prohibitive costs, high pupil to student ratios, lack of resources, and geographical isolation continually confront formal education's ability to meet the need. Added to this developing countries need to come up with a form of education that is qualitatively better than the educational models offered in the west. Education that empowers people to improve their lives and transforms their societies. An education that:

*'includes learning to know, to do, to live together and to be. It is an education geared at tapping each individual's talents and potential, and developing learners' personalities, so that they can improve their lives and transform their societies.'* (WEF 2000c:8)

Driven by necessity it is quite possible that the developing world will learn faster than the west and the centre of education innovation could shift to the developing world. Singh (Ortner 1992:240-245) points out that in India since Independence there has been an increased demand

for education. At the tertiary level the number of Universities has gone from 19 to 186 and Colleges from 636 to 5285. In 1982 Andhra Pradesh Open University opened and in 1985 Indira Gandhi National Open University which currently has 242,000 students. (Massey 186.236 Course Material Study Guide 1:3). Keeping up with this sort of demand places Third World governments in a never-ending cycle. They also have to balance these demands with other equally important needs for food, clean water, avoiding environmental degradation, health, and political aspirations. They could, therefore, be forced to come up with much more innovative and appropriate forms of education so that the powerhouse of educational thinking and change shifts to the developing world. Creating this sort of education system is, however, going to require a large amount of teacher training in the developing world and a commitment to change and improving standards. Models that encourage change and improvement such as the teacher-training model and the school accreditation model presented in this paper are going to need to be developed and expanded. It will also require a commitment to creating different sorts of education systems that are focused on empowering people and giving them training they can apply and use immediately, not completing irrelevant curriculum.

One particularly useful model of alternative education is Distance Education. There has been a rapid growth in Distance Education in the developing world in the last three decades and it is being used by millions of people around the world. It has proved to be a sustainable and cost effective alternative to formal education systems that simply cannot keep pace. Distance education, however, does not need to be limited to being a temporary, cost saving device. Villarroel points out that it 'can become a meaningful factor for promoting change in the Third World' (Ortner 1992:45). As such it could be part of a more realistic long-term solution to educational problems. The cost factor could be a major driving force for this sort of approach in island communities where the population is widely spread. Gannicott (1993:27) says 'Countries such as Vanuatu or Solomon Islands which face problems of bringing schooling to isolated groups of rural children will always face problems of relatively high costs.' He estimates that they will 'have to spend 13.4% of GDP in 2014 in order to offer 10years of schooling to everyone in the age group'. The only way of using formal methods would be to significantly cut on the quality of education offered. However, non-formal means such as distance education could be used effectively and cheaply in this sort of situation.

Non-formal education programmes have a number of advantages as well as the cost factors including the idea that they make life-long learning a realistic possibility. It may also use techniques that are better ways to learn than those currently found in formal classrooms. Recent brain research is now pointing education theory in a number of new directions. Abbot & Ryan (2001:5) claim that research on how people learn advocates 'a constructivist and

apprenticeship-based approach to learning'. Learning that is cooperative, community based, and uses apprenticeship type models may prove to be a far more efficient and appropriate way for people to learn. The research is also showing that while much of the learning that is important does take place early in life, provided the person is healthy, the brain remains plastic and open to new learning throughout life. If education is limited to formal schooling then no society could realistically envision life-long learning possibilities. However, with non-formal education people can be constantly up-skilling and much of the financial burden for this type of education can be covered privately, or be free, using community-based resources. It then becomes the job of the state and international organisations to make sure the programmes are available and to ensure their quality through proper evaluation and accreditation systems.

The Faure Commission stated that the guiding principle for educational policies should be that: 'every individual must be in a position to keep learning throughout his life. The idea of lifelong education is the keystone of the learning society.' (Faure et.al. 1972:181). Learning societies are societies that will constantly be in a state of self-examination and improvement. With this sort of model of a learning society, schools and education centres in the developing world could then become centres of excellence that are actively involved in solving other types of developmental problems. Places where, as well as being educated, people are helped with their nutritional needs, given health, and other forms of education so that they could improve their lives directly as well as through the broader ideas of development. Education where people are empowered is education where people are truly trusted and given the keys they need to unlock the doors and find development solutions for themselves and their communities.

## Appendices

### Appendix 1

<b>TEACHER EVALUATION</b>	
Name _____	Date _____
Position: _____	
Evaluation Purpose: _____	
<b>Summary of Evaluation Scale</b>	
1. Superior	4. At standard
2. Well above standard	5. Below standard
3. Above standard	6. Unsatisfactory
Category	Rating
Management of Instructional Time	
Management of Student Behaviour	
Instructional Feedback	
Evaluative Monitoring of Student Performance	
Instructional Management	
Facilitating Instruction	
Communicating with the Educational Environment	
Performing Non-instructional duties	
The Teacher's Personality Traits	
<b>Evaluator's Comments</b>	
Signature	
<b>Teacher's Comments</b>	
Signature	
<b>Professional Development Suggestions</b>	
Signature	

### 1. Management of Instructional Time.

- 1.1 Teacher is punctual to start and finish lesson.
- 1.2 Teacher's written materials are organised and well presented.
- 1.3 Teacher has all materials and equipment ready at the start of the lesson.
- 1.4 Teacher's lesson plan shows adequate planning and preparation.
- 1.5 Teacher settles class quickly and starts lesson activity.

COMMENTS

### 2. Management of student behaviour.

- 2.1 Teacher has established standard classroom rules for:
  - i. Routine administration.
  - ii. Verbal interaction in the classroom.
  - iii. Student movement and activity into, and within the classroom.
- 2.2 Teacher monitors student behaviour throughout in-class activities.
- 2.3 Teacher stops inappropriate behaviour promptly, consistently, positively, and without major interruptions in the flow of activity within the class.

COMMENTS

### 3. Instructional Feedback

- 3.1 Teacher provides feedback on the correctness or incorrectness of in-class work to encourage student growth at all levels.
- 3.2 Teacher provides prompt feedback on homework (where appropriate).
- 3.3 Teacher affirms a correct oral response and moves on.
- 3.4 Teacher uses various methods to deal with incorrect replies including: Repeating the question; asking supplementary questions; giving a clue; allowing more time; asking others for help.
- 3.5 Teacher corrects written assignments within a day, is thorough in this assessment, and ensures that the corrections are clearly understood.
- 3.6 Teacher has an effective and suitable method of incentives and rewards suited to the individual capacity of students.
- 3.7 Teacher adjusts methodology according to results revealed by correcting student's work. i.e. re-teaches areas where there is evident weakness; re-mediate for individuals who don't understand the skill or concept.

COMMENTS

#### 4. Evaluative Monitoring of Student Performance.

- 4.1 Teacher maintains firm and reasonable work standards.
- 4.2 Teacher moves around during class work to monitor all students' work.
- 4.3 Teacher regularly checks and records student progress using a variety of methods. i.e. oral questioning; written projects; testing; participation in group or whole class activities.

COMMENTS

#### 5. Instructional Management

- 5.1 Teacher begins lesson, with revision or links to previous lessons.
- 5.2. Teacher introduces lesson in a manner which draws the attention and interest of the students, outlining the lesson objectives.
- 5.3 Teacher speaks fluently and precisely.
- 5.4 Teacher presents lesson using ideas and language appropriate to the grade, and introducing new skills and concepts by breaking them down into logical, simple steps.
- 5.5 Teacher provides relevant examples and demonstrations to illustrate concepts and skills making use of cooperative learning where appropriate.
- 5.6 Teacher ensures tasks and questions are appropriate using creativity and variation.
- 5.7 Teacher assigns tasks that students handle with high success rate.
- 5.8 Teacher conducts lessons at a good pace slowing, where necessary, to help student understanding.
- 5.9 Teacher makes transitions between presentation and task activity smoothly and efficiently.
- 5.10 Teacher ensures assignment is clear.
- 5.11 Teacher summarises the main points at end of presentation.
- 5.12 Teacher demonstrates a thorough knowledge of the subject material showing evidence of research and further reading.
- 5.13 Teacher uses clear handwriting on board or overhead projector.
- 5.14 Teaching environment well utilised: furniture organisation; arrangement of materials; attention to bulletin boards.

COMMENTS

#### 6. Facilitating Instruction.

- 6.1 Teacher has an instructional plan which is compatible with the school's system wide curricular goals.
- 6.2 Teacher uses diagnostic information obtained from tests and other assessment procedures to develop and revise objectives and/or tasks.
- 6.3 Teacher maintains accurate records to document student performance.
- 6.4 Teacher has instructional plan that matches/aligns objectives, learning strategies, assessment and student needs at the appropriate level of difficulty.
- 6.5 Teacher creatively uses available human and material resources to support the lesson presentation.

COMMENTS

<b>7. Communicating with the educational environment.</b>	
7.1	Teacher treats all students in a fair and equal manner.
7.2	Teacher's relationship with students is characterised by: respect; a sincere seeking after the overall well-being of the students; their educational development; character development; social interaction in the school, the development of confidence; a healthy self-esteem.
7.3	Teacher interacts effectively with co-workers in a relationship marked by co-operation, respect, a willingness to share ideas, and harmony.
7.4	Teacher interacts effectively with parents in a relationship marked by cooperation and clear regular communication in which the teacher recognises the importance of the parent and the home atmosphere is foundational to the success of the educational process.
7.5	The teacher interacts effectively within the community.
COMMENTS	
<b>8. Performing Non-instructional duties.</b>	
8.1	Teacher carries out non-instructional duties as assigned.
8.2	Teacher adheres to established laws, policies, rules and regulations.
8.3	Teacher follows a plan for professional development and demonstrates evidence of growth.
8.4	Teacher actively participates in teacher training programmes and is actively putting this learning into practice.
COMMENTS	
<b>9. The teacher's personality traits</b>	
9.1	Demonstrates diligence (hardworking).
9.2	Demonstrates commitment to career.
9.3	Punctual in class and for assignments.
9.4	Demonstrates loyalty to the College.
9.5	Demonstrates willingness in taking out of class responsibilities.
9.6	Demonstrates leadership abilities.
9.7	Enjoys good relationships with colleagues.
9.8	Responsive to senior supervision.
9.9	Demonstrates a willingness to learn and grow.
9.10	Personal presentation is neat and professional.
9.11	Makes an individual effort to further knowledge in the profession.
9.12	Regular in attendance.
9.13	Demonstrates responsibility.
COMMENTS	

## Questionnaire to guide post observation interview

- 1 Is further training needed in certain areas? Specify.
2. Does the teacher exhibit and demonstrate qualities that make promotion a consideration? Specify.
- 3 Discuss the following with the teacher and record as necessary.
  - 3.1 In what areas do you feel you need further training or experience?
  - 3.2 In what ways do you think the school administration can offer you support?
  - 3.3 What material resources do you think you need that will make your work more effective?
  - 3.4 If you could change something - what would it be?
  - 3.5 What are your career development ambitions?
  - 3.6 Rate your job satisfaction:-  

Very fulfilling    More than satisfactory    Satisfactory    Less than satisfactory    Unsatisfactory

### **Evaluator's recommendations and comments.**

## Appendix 2.

# Nutrition

## Nutrition Lesson

As you study this lesson try to think about

- The different things we need food for.
- Those foods that provide nutrients that are essential in our diet.
- The difference between healthy and unhealthy food.

## Our Diet

The food we eat each day makes up our diet. Whatever we choose to eat, it must include

- Carbohydrates – sugar, starch, fiber
- Fats & Oils
- Proteins
- Vitamins and Minerals

### *Carbohydrates*

This group of food serves mainly as a fuel giving us energy. It comes mainly in the form of sugars and starch. Cellulose, which plant walls are made of, is a carbohydrate that cannot be digested but supplies an important source of fiber or roughage to keep our gut healthy.

### **Fats and Oils**

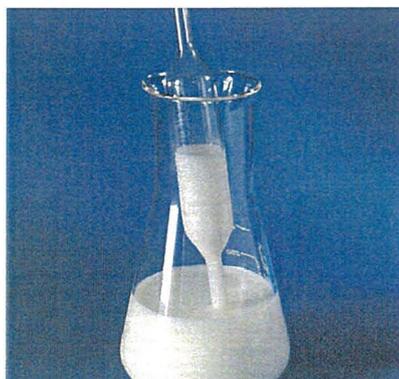
Like carbohydrates these give us energy. They can also be stored under the skin where they help to keep the body warm as well as storing energy. Too many fats and a fat-like substance called cholesterol can lead to obesity and heart disease. Unfortunately many processed and fast foods are high in these unhealthy types of fats. Milk supplies natural fats in a liquid form that can be easily digested and so drunk during school hours it provides children with the energy they need.

### **Protein**

Proteins are made up of amino acids and form the main structures of muscle and skin. They are essential for growth and the repair and replacement of tissue. It is essential that children have a good source of daily protein if they are going to remain healthy. Protein is present in most foods but it is particularly plentiful in **milk, eggs and meat**. A large glass of milk can supply most of the daily 70grams of protein that doctors recommend.

In the table below each food is given a mark out of ten depending on how good it is at giving us all the amino acids we need. A high mark means it contains all the essential amino acids in the right proportions for humans.

Type of Protein	Marks out of 10
Mother's Milk	10
Fish	8
Meat	8
Cow's Milk	7.5
Liver	6.5
Rice	5.5
Soya Beans	5.5
Peas	4.5
Beans	4.5



## Vitamins

In the early 1900's English scientist Frederick Gowland Hopkins found something interesting. He fed rats on a special food of purified carbohydrates, fats, proteins and minerals. All the substances known to be necessary for a healthy life. After a few weeks the rats were dead. A second group was given exactly the same food mixture plus a small amount of **milk**. They flourished. We now know the extra something they got from milk was vitamins.

- Vitamin A – is important for our eyes and helps you see in the dark.
- Vitamin Bs – are important to help our cells transfer energy and helps you concentrate.
- Vitamin C – essential in the prevention of scurvy and helps heal cuts and bruises.
- Vitamin D - helps the bones and teeth absorb calcium and prevents rickets.

If you want strong bones and teeth join

## Minerals

- **Sodium** – important in the blood and nervous system. It is found in salt.

- **Calcium** – essential for bone development. Milk has the highest calcium content of all foods. Did you know that two large cups of milk provides a child with over half their daily calcium needs? That is equivalent to 22 beef potatoes, or 48 apples.

- **Iron** -essential for our blood
- **Iodine** – prevents goiter



for proper bone development. Milk has the highest calcium content of all foods. Did you know that two cups of milk provides a child with over half their daily calcium needs? That is equivalent to 22 beef potatoes, or 48 apples.

## Fact Sheet

- Milk is a complete, natural and balanced food
- Milk contains all the major food groups – fat, protein, vitamins and minerals
- Milk drunk at school supplies children with energy and helps them to concentrate, helping them both physically and mentally
- As little as half a liter of milk provides a child with
  - adequate energy
  - 1/3 of the daily protein requirements
  - 1/5 of the daily calcium
  - 3/4 of the daily Vitamins B2 & B12
  - up to 1/2 the daily Vit. A, B1, B6 & C

## Appendix 3

## Distance Education Survey (Results)

1. Year you started your B.D.
2. Year you expect to complete
3. Previous degree qualifications:
4. Marital Status      Single 8%                      Married 92 %
5. Reasons for doing a B.D. (feel free to mark more than one)
 

Upgrade your previous degree 4%	Use in present work 82%
Personal development 66%	For future work 62%
As a qualification 26%	Others (please specify)
6. Why are you a distance education student rather than an internal student (mark one or more)
 

Cost 22%	Time 72%
Prefer distance education 10%	Able to learn while still working 44%
Family considerations 58%	Others (please specify)
7. If someone offered to sponsor you completely would you become an internal student?
 

Yes 26 %	No 50%	Uncertain 24%
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8. Please mark the main advantages for you being an Distance Education student (Mark one or more)
 

Cost 28%	Able to continue working 78%	Quality of materials 32%
Interaction with other Distance Education Students 16%		
Flexibility in structuring the programme 44%		
Others (please specify)		
9. Now please mark the disadvantages
 

Time 40%	Lack of access to books 66%	Lack of tutorial help 46%
Inadequate or outdated materials 20%	No lectures 46%	
Lack of feedback on assignments 54%		
Others (please specify)		

For Questions 10 - 14 please circle a number on the scale from 1 - 5. 1 being strongly agree with the statement and 5 strongly disagree.

- |   |                       |
|---|-----------------------|
|   | 36% 36% 20% 6% 2%     |
| 10. Materials used in the course are consistently high quality                              | 1    2    3    4    5 |
|   |                       |
| 11. People trained by Distance Education can be as effective as those trained internally.   | 54% 18% 22% 6% 0%     |
|   | 1    2    3    4    5 |
|   |                       |
| 12. Getting a BD by Distance Education is easier than as an internal student                | 6% 6% 22% 22% 44%     |
|   | 1    2    3    4    5 |
|   |                       |
| 13. Receiving training where I am now keeps me in contact with the needs and opportunities. | 58% 30% 8% 2% 2%      |
|   | 1    2    3    4    5 |
|   |                       |
| 14. Distance education helps develop a pattern for life long learning                       | 50% 24% 24% 2% 0%     |
|   | 1    2    3    4    4 |
|   |                       |
| 15. If you were in charge of the B.D. programme what things would you change?               |                       |

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