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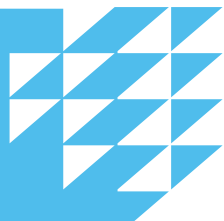# ADULT EDUCATION: THE ALPHA (α) AND OMEGA (Ω) OF ALL EDUCATION

INAUGURAL LECTURE

BY

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ADULT EDUCATION: THE ALPHA (α) AND OMEGA (Ω) OF ALL EDUCATION

AN INAUGURAL LECTURE

BY

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Preface to the Professorial Inaugural Lecture Series

Professorial inaugural lectures are part of our engagement strategy and outreach service as they afford the University through its professors an opportunity to share the knowledge and experience cultivated over time with the general public. They also serve as an inspiration to our younger colleagues who are still working their way up the academic ladder.

It is my conviction that the inaugural lecture series will continue to cater for our multiple needs and purposes as an institution and a nation. They act as a resource for students, lecturers and other practitioners. They also provide critical information for planning the institutional operations and the shape and scope that the academic discourse must take across the institution.

The University of Botswana is proud that its Centre for Continuing Education (CCE) has taken over the initiative started in 1985 by the then National Institute for Research and continues to organise the lectures with untiring zeal. The purpose of this general introduction, therefore, is to attempt to invigorate this vibrant initiative and help to spur it to greater heights in an academic setting that is changing in line with the changing demands of the present day Botswana society which is making various demands on the University of Botswana. The professorial inaugural lecture series is therefore a unique response to the cry of our society whose members desire to be effective stakeholders and partners with the University of Botswana going forward.

Professor Isaac Ncube Mazonde

Director, Office of Research and Development

ABSTRACT

Adult Education is the first education that mankind ever benefitted from. It is equally the last education in the life of every human being. In this sense, it is the beginning and end of all education not merely because of the prime chronological position it occupies among all types of education but also because of its significance and inevitability within the context of human learning experience.

At creation, the first human being found himself in a strange and unusual environment. He needed education to make sense of his new experience. This first ever education was facilitated at a distance by the Creator Himself; the universe was the non-formal learning environment employed, the contents of this education were made up of survival skills and elements of the universe were employed as learning aids. Thus was born the first ever open and distance learning experience. Beyond this initial educational occurrence, the education undergone by the human fetus, the growing infant, members of ancient societies (Greek, Africa) and first religious students constitute the string of first types of Adult Education that mankind usually benefit from. Graduation ceremonies, retirement processes, U3A offerings and opportunities for dying well are examples of the manner in which Adult Education offers itself as tool for advancing the various inevitable types of last learning in human beings' life.

Yet, as vital as first and last educations have proven to be to man's happiness, the major waves of change the world has witnessed (Toffler & Toffler, 2006; UN, 2000; Drucker, 1993; Toffler, 1991a,b,c; Herberman, 1984), have proven that Adult Education has been employed to provide solutions to major human challenges since the dawn of days. In this sense, Adult Education is not merely the first and last educations needed by mankind but it is the Alpha and Omega of all education as beyond being the entry and exit points of human education, it is education that is needed throughout the course of human life.

If Adult Education is this important, of what practical benefit could it further be to nations of the earth in general and to Africa in particular? It

can help boost the provision of basic education; it can serve as leverage to African universities' performance and it can assist in advancing African development efforts beyond its present achievement level. Two main policy recommendations have been proffered by way of indicating the manner in which Adult Education may be employed to bring about the possibilities mentioned here.

Key words: Adult Education; Adult Education as first and last educations; Adult Education as lifelong education.

INTRODUCTION

The phenomenon known as "Adult Education" remains something of an enigma and a subject yet to be understood by numerous persons. To many an educated person, the possibility of learning truly and adequately, outside the school system remains a doubtful venture if not an outright laughable proposition; learning acquired and diplomas obtained outside the school system remain lowly regarded and not highly appreciated by the public.

Where some understanding of Adult Education has been demonstrated, this knowledge area has been equated with the teaching of literacy skills to some obscure elderly persons or at best to the learning assistance rendered in the evenings to some youths who had failed to cope with the rigours of formal education and who by that token were referred to as failures of the school system; with some great generosity of understanding, Adult Education has been associated in the minds of a few people to learning acquired in the course of some professional enrichment programme.

In other words, Adult Education means many different things to many different persons and social strata; on the whole however, it is still an educational typology fairly well misunderstood and currently lowly valued by African countries.

Sub-Saharan African governments themselves have demonstrated open reluctance and even unwillingness to fund the Adult Education sub-sector; for example, in 2010, Botswana spent only 0.15 per cent of its about 10 billion pula (P10 Billion) education budget on consultancies for adult basic education (Gaothobogwe, 2010); South African education budget during the same period hardly mentioned adult or non-formal education, although an important portion of the budget was spent on

training in colleges known as "further education and training colleges" (BuaNews, 2010), thereby leaving work in the out-of-school sector at the mercy of chance; although Nigeria is known to have an Adult Education activities coordinating agency known as the "National Commission for Literacy Adult and Mass Education", paltry was the allocation reserved to this agency within the 2010 national education budget (Ministry of Education, 2010).

A part from Burkina Faso and Benin, two francophone West African countries, no other country on the continent has strived to spend about 3 percent of its total education budget on Adult Education (Archer, 2010); it is not as if Burkina Faso and Benin have succeeded in spending a meaningful percentage of their national education budgets on Adult Education; however, they are two countries that have, since 1997, the year of CONFINTEA V, tried hard to actualize the recommendation of the International Commission on Education for the Twenty-first Century, which recommends that member states should invest at least 6 percent of their gross national product (GNP) in education and to allocate an equitable share of that education budget to Adult Education.

Additionally, a number of Sub-Saharan African countries, including Lesotho, Gabon and Uganda, to cite but a few, have failed to provide visible and effective structures of Adult Education at the national levels.

These woes of Adult Education are not exclusively an African problem; outside Africa and indeed in the industrialized countries of the world, Adult Education continues to carry its burden of woes; in their discussion of the "disappointing flourishing of lifelong learning", Duke and Hinzen (2009:32) submit:

We can take pride in how far we have come since World War Two, without being complacent about what we have not succeeded in doing. At that time much of the world was still in the thrall of colonialism. Development, development aid, and North-South relations were unheard of. Piaget reigned in the psychology of personal development and it was taken for granted that from early adulthood learning virtually ended and it was all downhill. Schooling for the young, higher education for a tiny minority and for most people what you achieved by age twenty, or much earlier in practice determined all that followed thereafter. Clearly we have moved a very long way from there.

With the sixties and the rise of internationalism after the War, great progress was made from the time of Harold Macmillan's "winds of change" end-of-colonialism speech: new ideas, new ways of seeing hopes for a better world, development and emancipation raking many forms.

However, despite the blossoming of "lifelong learning" at this time, with early seminal papers from UNESCO, OECD and others, and its almost overnight rhetorical adoption by governments first in the North and then South, from the mid-nineties, we have seen support for Adult Education rise but then recede in most national and even international policy agendas. Its public provision has fallen, and its ambitions and horizons have been narrowed (P.32).

Yet, Adult Education has been and remains the alpha (α) and omega (Ω) education available to all human beings, be they women or men, poor or rich, obscure or famous, ignorant or learned.

CONCEPT OF "ALPHA AND OMEGA" EDUCATION

Alpha (α) and Omega (Ω) are Greek alphabet letters that have been used in both popular and uncommon situations up until our modern era. "The Greek alphabet emerged in the late 9th century BCE or early 8th century BCE" (Wikipedia) and it is a system that establishes corresponding and ordinal relationships between letters and numbers. In this sense Alpha (α), the first letter of the alphabet is equivalent to "1" while Omega (Ω), the last letter in the Greek alphabet is equivalent to the last possible number.

As a result of the near ageless culture of ancient Greece and more especially, because of the mythical aura that surrounds all that is ancient Greek, the first and last letters of the Greek alphabet have themselves been employed and interpreted to mean a variety of phenomena within different contexts. For example, mystical and near mysterious interpretations have been attributed to some of the Greek alphabet letters; more easily identifiable are the religious and spiritual connotations attributed to "α" and "Ω" wherein God or His Representatives (in a number of religions) are said to be the "Beginning" and the "End" of creation or of all that is perceivable and unperceivable by human beings. Additionally, Greek alphabets are currently used as symbols in many knowledge areas such as Mathematics, Engineering, Physics and other sciences. Indeed a few social and business corporations have adopted Greek alphabet letters as corporate names

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and Greek symbols have been used as charms and talisman within environments where beliefs in these things hold sway.

Within the current context, Alpha (α) and Omega (Ω) are employed to denote not only the beginning or first type of education, but also the ordinal end or last type of education; "Alpha and Omega" is equally used here to imply the ubiquitous nature of Adult Education wherein, like Greek alphabet letters, Adult Education cuts through all disciplines by offering itself to be used as a channel for the dissemination of the latter.

In this sense, "First and last" implies a chronological sequence in which "first" denotes No.1 and "last" "No. x" where "x" represents a discrete number or a ranked phenomenon whose position indicates finality beyond which nothing else exists. Within this context, it is implied that Adult Education is chronologically, the first type of education received by all human beings and by extension, it is the type of education received or needed by all, when preparing to experience the great transition from material state of consciousness to the metaphysical state of consciousness and existence.

However, "First and Last Education" carries more than chronological connotation within the frame of the current discussion; it also implies "important type of education" by virtue of the support it provides for the attainment of decent, balanced and meaningful living throughout life and by virtue of its relevance to many knowledge areas as indicated earlier; for example, Adult Education contents, structure and relevance remain topical throughout life and the flexibility of its learning processes and formats makes Adult Education adaptable to all conditions and all age groups throughout life; the fact that Adult Education processes equip learners with problem-solving skills and develop in them a sense of

criticalness which other types of education do not develop, makes Adult Education truly important to life and successful living.

Additionally, Adult Education addresses the essence of life and the purpose of living; that essence is "development"; it is one thing to exist but quite another to grow, emancipate and develop; all human societies aspire towards growth and development; throughout human history, societies have devised educational systems that are supportive of developmental plans and growth; an examination of those ancient and new systems of education reveals not only the existence of an Adult Educational intention but of concrete Adult Educational programmes; whether we examine African Traditional Education, or the first type of education that emancipated the New World (United States of America) or the type of education that supported and advanced the cause of 18th and 19th centuries Industrial Revolution in Europe, one discovers the immeasurable role played by Adult Education.

Perhaps more than ever before, Adult Education has become an important tool for development since within the globalised and dizzyingly developing world, very few of the knowledge (knowledge systems) of yesterday remain relevant and opportune by the day after. This suggests that, much of that which may have been learnt in the previous years, ultimately needs to be re-adjusted, re-oriented through learning in later years to serve the purpose of the new times; indeed some of the earlier learning would need to be discarded all together.

ALPHA AND OMEGA EDUCATION

ASCHRONOLOGICAL EVENTS

In a chronological sense, there are Adult Educational programmes and activities that have happened first before others either as a result of necessity or as a result of providential design.

Adult Education as First or Beginning of all Education

The whole of existence began through the process known as "creation"; creation is the process through which the Creator established all that is created on the surface, within and under the earth; of all that was created, the human being seems to be the most evolved not because of his size, but because of his advanced reasoning capabilities and because of his Free Will wherein the human being is said to have been created strong enough "to stand, but free to fall" or "Man was born free but he is everywhere in chains" that he may choose to break or not to break (Rousseau, 1762).

The stories of creation are derived from cosmogonies; cosmogony is "any scientific or (unscientific "*sic*") theory concerning the coming into existence of the world or how what sentient beings perceive as reality came to be" (Wikipedia, 2012). There exists two main categories of cosmogony (popular cosmogonies and classical cosmogonies); popular cosmogonies are the stories of creation most accessible to all and sundry; all human communities have their own popular cosmogonies; for example, Batswana submit that the first human being to be created and indeed all created things may have originated from water; water,

having been elected as a created element that predated all other created phenomena.

A West African cosmogony states that, after the separation of the Earth and Heavens, creation continued with the making of one man named Agbon Meregun; Agbon Meregun was sent out from the Heavens with a fowl and a grain of maize; the fowl was to be his companion while the grain of maize was to serve as his food and that of his companion; while descending towards the earth, Agbon Meregun was overtaken by a temporary distraction and the grain of maize fell off his hand downward; on noticing that they were doomed without the grain of maize as they might starve to death, the fowl demanded to be allowed to engage in a free fall with the view to recuperating the grain of maize; the fowl was let off and on reaching the earth, it discovered that it was covered with water; it then began to push backward the water with its limbs in the effort to find the grain of maize; each time it pushed back water, the earth revealed itself until all waters gathered into seas, rivers and lagoons and until it found the grain of maize; when Agbon Meregun then arrived, it landed on a patch of dry land and thus began human and animal progeny.

Classical cosmogonies, are deeper, more philosophically involving and more esoteric stories of creation which are found in Holy Books and records of Mystery Schools; however, like popular cosmogonies, classical cosmogonies equally put the human being at the centre of creation; both popular and classical cosmogonies are agreeable on the facts that the human being came to the earth, from the Heavens; having arrived the earth, he found the earth both a new and strange place he must learn about and understand if he must make a success of the experience that creation has led him into. For example, it became necessary for this first being to learn to feed himself both in a material

sense and in a harmless manner; it was also necessary to learn to shelter and protect himself against the menace of wild animals; the need was there too for this first being to learn to comprehend both living and non-living entities surrounding him and to learn to adjust to both the topography and climate of his new home.

Behind every learning, is a facilitator; the facilitator for the very first learning carried out by the first human being was the Creator himself. He facilitated this learning from a distance that separated the Heavens from the earth; this made this original teaching-learning enterprise a distance learning activity. Worthy of note is the fact that the first created person was an adult, as it is said: "And God said, let us make man in our image, after our likeness" (Genesis, Chapter 1 Verse 26); this then made the very first teaching-learning activity on earth to be an Adult Education activity. Beyond the adulthood status of the person who received the first education, the contents of the education he received, the methods and techniques employed in facilitating this learning and the non-formal nature of the environment within which he received instruction, all combine to confer on that first educational enterprise, an Adult Educational characteristic.

Secondly, the discovery of how Adult Educational initial education received by human beings can be, was established within the context of procreation; the very first human being having been made, the process of creation proceeded further as planned by the Creator until the process of human procreation was made intelligible; within this process, it is seen that the human fetus is able to learn to adjust to the womb environment, to the changing moods of the pregnant woman; the fetus is equally able to learn and recall habits, mannerisms and sensations that may become obvious in the infant and adult of tomorrow (Hepper, 1996; Wilkin, 1993; Hepper, 1991).

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There is substantial evidence that fetal memory exists within the first and second trimester after conception when the egg is fertilised. Evidence of this has been found as early as 30 weeks after conception…………... One of the most important types of memory is that which stores information contributing to the maternal bond between infant and mother. This form of memory is important for a type of development known as attachment (Wikipedia, 2011).

The student in this case is not an adult; it is a baby to be, that is nevertheless, already learning using Adult Education facilities, methods and techniques; the contents of its learning (survival techniques, adjustment and compromise with mummy), the both informal and non-formal natures of the environments within which it is carrying out its learning and the non-face-to-face method of learning and the multiple-facilitator (the Creator and the mother) approach involved in the teaching-learning activity of the fetus, all lend an Adult Educational character to the education that the fetus undergoes.

Thirdly, when the fetus has survived the womb experiences and learning and is able to come out as a live baby, it begins another round of education and learning; this round of education is yet another "First Education" as far as the physical world and independent living are concerned. During infancy the baby begins to learn to put its sensory organs to efficient use with the view not only to protect itself against harm but also with the view to understanding the new environment within which it has come. Thus, the baby learns to differentiate sound patterns made by the mother from sound patterns made by other

persons with whom it will not feel as safe as it will, with the mother; the baby also learns many other functions such as babbling (primitive form of language learning) and preliminary use of limbs (Gonzalez-Gonzalez, Suarez, Perez-Pinero, Armas and Bartha, 2006).

The learning contents in this case are not of any significance to the Adult Educational focus of this discussion as babies, children as well as adults are known to be engaged in the learning of such things as new languages and proper use of limbs in particular physical exercises. However, the non-formal environment within which this learning is carried out and the self-instructional technique used in carrying on learning in this case are the Adult Educational features of this learning enterprise.

Fourthly, the type of education which today, is referred to as "modern education" or "western education" or "formal education" originated from ancient Greece where it was practised as Adult Education.

 The history of Greek education may be divided into three phases, namely, ancient Greek education, Greek New education and Greek modern education (Boyd and King, 1972). From the 4th century BCE, Greek New education began to spread to other parts of the world.

> With the rise of the Macedonian Empire and the eclipse of the Greek States, the civilization of Greece stepped out of its national limitations and became the common civilisation of all the nations on the shores of the Mediterranean (Boyd and King, 1972: 44)

 Today, the typology of education that Romans and the whole of Europe inherited from the Greeks has been made into such a rigid form that it is now widely practised as "formal education".

Yet, during the times of such celebrated Greek philosophers as Socrates (469-399 BCE), Plato (427-347 BCE) and Thales (640-562 BCE) to cite but a few, education was primarily Adult Educational in content, methods and processes; the content was natural in that it sought to serve the ends of society in physical and metaphysical ways; the methods were both liberating and self-directional as they placed the responsibility for learning squarely in the hands of the learners, whatever their age; additionally, the environment where learning took place was non-formal in tone and form; the processes that were termed educational were philosophical, deep-seated and they were designed to quicken insightfulness and to reveal the inner self unto the outer self.

Socrates was he, who enunciated the very first theory of education and this theory advanced the cause of Adult Education; he began by submitting that human beings are neither naturally nor automatically virtuous; the essence of living being that every human being should eventually attain unto virtue, Socrates adjudged that virtue can only be attained through some form of education that is to be received by man; yet, he posits that it was immoral for one person to teach (supply load of facts) another with the pretence that learning can result from teaching others. It was the view of Socrates that for learning to result from an educational enterprise or encounter, a problem must be identified which must be broken down by an individual or individuals, into its minute understandable constituent parts and through interrogation of each constituent parts, light or learning will gradually result; according to Socrates, that which is eventually learnt is really not external to the individual as all that is to be known lies dormant within each individual waiting to be awakened; in this sense, no individual is a tabula rasa, not even a fetus or a baby; the interrogation or prodding rod that Socrates recommended for awakening the inner knowledge is the process of questioning; not only are the questions asked to bear relevance to the

problem at hand, they are to be phrased in a way as to stimulate critical reflection that is to produce the final learning.

Therefore the educational theory which seeks to scientifically establish relationships and determine effects of educational processes and inputs, had its humble beginning about two millennia and a half ago wherein Socrates outlined the goal of education (virtuousness), its processes (steps involved in problem solving), its clients (the human being within all age brackets) and its resulting effects (a good society).

Fifth, even before the advent of Greek education, the Sumerian school that appeared between 3500 and 2500 BCE during the Mesopotamian civilisation (Boyd and King, 1972), promoted Adult Education. Education held in Temples and all, including adolescents, were welcome to learn in these Temples; the studies of Man Nature and God were carried out in these Temples; in these Temples, learning sessions may begin with one leader and end with another leader drawn from among the learners; this is because where a learner was discovered to be exceptionally knowledgeable in an area of human endeavour, he or she was allowed to lead discussions in that area. Through this system of Temple education, which betrays the characteristics of Adult Education, Sumerians were able to exhibit the features identified by McNeil (1971) as indicators of civilisation, namely:

> *unusually massive societies, weaving the lives of millions of persons into a loose yet coherent life style across hundreds or even thousands of miles and for periods of time that are very long when measured by the span of an individual human life (McNeil, 1971:v)*

Sixth, religious institutions are accepted as educational institutions of a sort; most of these religions have founders and leaders; during their life

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time these founders taught their disciples, not in classrooms, following some formal time-tables; they taught them using the conference, workshop and convention methods and these founders' techniques of communication varied from such unconventional techniques as use of parables to plain and straight talking; needless to say that the learning environments are usually non-formal in nature.

Hinduism which is the oldest living religion and which has no known founder and whose history is traced to the Bronze Age, about 20,000 years ago (Walker, 1968; Majumdar, Raychauduri & Kaukinkar, 1960) exhibits such Adult Educational traits when one examines the practices of its leaders.

Seventh, that which is referred to as Traditional African Education is nothing but Adult Education par excellence. It is functional education whose objectives are to serve society; consequently, its contents are woven around society's needs and its methods and techniques are both non-formal and informal.

> *Informal and vocational training constitutes the core of indigenous education in Africa. Under this traditional system, each person in the community is practically trained and prepared for his or her role in society (Omolewa, 2007:1)*

Not only is Traditional African Education Adult Educational in content and form, it is the first type of education in Sub-Saharan Africa.

Adult Education as Last Education

In a chronological sense, the examples that follow here highlight those types of learning that are needed after an initial education has been

acquired; a learning such as this is usually indispensable for launching the individual into the world of work and professional performance and into the world of living in general.

Graduation ceremonies are common occurrences. Such a ceremony usually marks the end of study in each segment of formal education including primary, secondary and tertiary levels. It is usually organised at the end of any apprenticeship programme. Within the context of traditional African Education, each vocational training or initiation programme is usually followed by a graduation ceremony.

The main objective of a graduation ceremony is to introduce the graduate to either the world of work or a different level of training or living. It constitutes a process whereby the individual is instructed in the way he may use his skills not only to benefit society but in the way the graduate's new skills may help him or her to reintegrate and blend with society. It consists in proffering to the graduate, the right kind of pieces of advice that he will need in the next stage of his endeavour; it also consists in equipping the graduate with the last skills that will be useful to him in subsequent stages of living.

In its best form, graduation ceremonies are interactive and they hold within an atmosphere where, for the first time, the student is accepted as equal to his master; the conviviality that attend graduation ceremonies accentuates the flexibility and informality within which learning may occur outside the school; in this sense therefore, graduation ceremonies are Adult Educational in contents, organization and methods.

The two views (one traditional and the other more modern) expressed below illustrate the adult educational role of graduation ceremonies in human societies.

1. *The final entrance into adulthood has been provided from time immemorial by the 'coming of age' ceremony………..the coming of age ceremony located the individual anew within the surrounding community and indeed within the universe as a whole. It was a critical moment of expansion, the entrance into larger responsibilities, larger privileges, larger secrets, larger institutions, and larger understandings. It amounted to a second birth, entry not into physical life but into higher life of culture and the spirit………(OCRT, 2011).*

2. *Pretoria—For 170 inmates from prisons across Gauteng, months of hard work and determination paid off on Wednesday when they were awarded their certificates, diplomas and degrees during a graduation ceremony at Pretoria Prison. With their friends and families looking on, the inmates, who had swapped their prison overalls for gowns, proudly took to the stage during the ceremony which was presided over by the University of South Africa (Unisa) and officials from the Department of Correctional Services. One by one, the men and women were awarded qualifications ranging from certificates to degrees in different fields of study, to much applause.*
   Among the graduates was top achiever 63-year old Casper Greeff, who was awarded a doctorate in Biblical Archaeology. (AfricanBrains, 2010).

This last example suggests that the transition from lower achievements to higher achievements may be multi-dimensional, spanning physical, intellectual, spiritual and other metaphysical planes of consciousness.

In all cases, graduation ceremonies mark the coming of a higher state of awareness which is appreciated by all societies because of its potentials to advance society on all fronts.

Second, one popular event that happens in the life of most modern persons is retirement from active work; this work may be government or private sector or personal work. There comes a period in the human being's life when an original full time work either has to be slowed down or taken as leisure activity or stopped all together. Whichever is the case, one is within the realm of retirement.

In modern times, the need to prepare for retirement has been echoed loudly because of the advantages of such a preparation. On one hand, such a preparation enables the individual to transit with minimal traumas from the world of work to the world of rest; on the other hand, such a preparation makes living pleasurable and hassle-free during retirement.

A learning programme aimed at preparing the individual for retirement is a series of discussion aimed at equipping him with specific pieces of knowledge and skills; for example, he learns about the amount of money that will be available to him on a monthly basis and he is taught how to adjust his expenses downward to fit within his earnings; he is presented with a list of possible national or international towns in which a retiree may spend a profitable retirement life and he is engaged in discussion with the view to helping him make appropriate choices in line with his taste and fancy but within the brackets of his economic power.

In all, retirement education covers the areas of personal economics, personal health, leisure, psychological concerns and post-retirement work. Apart from the fact that the discussion of these issues is

personalised during retirement learning programmes, the contents of the learning programme are intimately related to day-to-day living; it is therefore "real" learning whose importance as immediate panacea to situations and solutions to real life problems are not in doubt; additionally, the clients of this type of learning are persons who have gone past the age of conventional schooling and who therefore are learning within the non-formal education environment. All these characteristics combine to make retirement education an Adult Educational activity; but more importantly, retirement education is one of the vital last educations.

Third, the University of the Third Age (U3A) is a relatively new phenomenon which equally falls within the gamut of vital last educations. Its appearance and quick expansion was fanned by two factors, namely, the need to keep up with the rapid and interminable changes to which man's life is subjected and the need to keep mentally active even during retirement.

Change is a natural phenomenon; it is equally the only permanent thing in life; it does not stop just because a person has gone on retirement; it is an impersonal phenomenon that goes its course irrespective of the human beings' feelings and position; the challenges that change throws up must constantly be confronted and dealt with decisively or else, they will overrun the human being and make his life miserable; in order to avoid this foreseeable but unpleasant situation, most persons who have disengaged from full time work, do enroll on the types of learning that can continue to keep them abreast of changes in the worlds of work, leisure, health, economics and general living.

Also, it has been found out that intellectual abilities tend to decline with old age (Oyedeji, 1988); although it has been submitted too that the abilities of those who have spent a lifetime using their intellect do not suffer noticeable intellectual decline in old age, unless they were attacked by a neurological disease (Oyedeji, 1988); in order to keep their intellect functioning and agile, persons that have discontinued full time work have found U3A useful in keeping them alive mentally and intellectually.

The University of the Third Age or the University of the Third (post-retirement) Age, made its humble beginning in Toulouse (France) in 1972. It got accepted as a worthy educational model in the United Kingdom at the beginning of the 1980s and was first run in Southern Africa (Cape Town) in 2000 (U3A, 2011). U3A is:

> *a learning co-operative for 'third agers'. This term was coined to refer to what we in South Africa tend to call senior citizens - older people from all walks of life who are no longer in full time employment.*

> *U3A began in France in 1972, under the aegis of the University of Toulouse. In the French model, faculty members and working academics are course facilitators and lecturers. With its spread to the UK and the realization that Third Agers had the skills to organize and teach their own autonomous learning groups, the nature of the organisation changed and this model has been enthusiastically adopted in more than 30 countries around the world. Today, U3A is a learning co-operative with objects and principles, inter alia, "to assail the dogma of*

intellectual decline with age", "to provide from amongst the retired, the resources for the development and intensification of their intellectual, cultural and aesthetic lives", "to create an institution … where there is no distinction between the class of those who teach and those who learn …." The word 'university' in the name of the institution is used in its original sense, meaning a corporation of persons devoted to a particular activity, not necessarily intellectual. Its course leaders therefore are experienced volunteers. While some may be retired academics, many are amateur enthusiasts! (U3A, 2011).

Fourth, living is one thing but dying is another. Since human beings have come to learn that death is the inevitable end that awaits all mortals, in addition to seeking the elixir of life that may prolong life as much as possible, they also seek to die well.

One way of dying well has been for terminally sick persons or terminally old persons to seek appropriate fora and environments to make the most of the last days of their lives as they face losses on many fronts. In the words of Borchard (2011), some of these losses include the loss of the future, of physical strength, of independence, of privacy, of dignity.

Enduring those losses can be difficult, but there are ways that people can cope and move forward. …………...some find comfort in ritual and prayer; others find comfort by spending time in the natural world or surrounded by family and friends. Others find meaning by pursuing daily activities, finishing projects, saying good-bye to loved ones. Many people cope by writing down their thoughts and

feelings, or by engaging in life review activities that allow them to tell their story and to shape a legacy (Borchard, 2011).

Adult Educational designs and formats for promoting learning that support living and enjoyment of life during the difficult times described earlier abound and they are found within the realm of gerontological studies; gerontology concerns itself with the social, psychological and biological aspects of aging (Haley and Zelinski, 2007; Howell, 1987) but, it equally includes the study of the techniques and processes by which nurses are trained to care for the aged, the ways in which educators bring information and skills to the elderly with the view to alleviating discomfort and promoting social and psychological equilibrium and the processes through which transporters provide information designed to make the movement of the elderly from place to place comfortable and convenient. It also includes the advisory techniques and information of the nutritionist and of clothes designer regarding the types of food and clothing that can bring comfort and sustain life at the level of the elderly. The processes of gerontology equally include the useful information provided by the furniture designer, the horticulturist, the beautician, the aerobics expert and the finance expert in respect to the appropriate types of furniture, plant, cosmetics, physical exercise and financial activities the elderly may seek and use or indulge in.

One other aspect of the process of dying well concerns the erection of structures and/or institutions with the view to facilitating the bequeathing and transmission to succeeding generations specific philosophies of life earned by older generations through the process of maturation.

Psychology of consciousness has broken down human life into seven major cycles of seven years wherein the first seven years of an infant are spent in growing into a child during which time he/she familiarizes himself/herself with his or her immediate environment. The second cycle of seven years is spent in maturing vital organs such as the vocal, reproductive and sensory organs; the third cycle of seven years is spent in developing the psychic aspect of the human being wherein he develops his moral and spiritual aspects to a noticeable level; in this third cycle, the sense of responsibility which highlights the individual's character and personality is gained; the fourth cycle of seven years is committed to the development of the emotional aspect of the human being with a further reinforcement of his sense of responsibility and his or her tendency to knot intimate relationship with the opposite sex; during the fifth cycle of seven years, the individual reaches his or her apogee in mind creative processes and he/she tends to commit himself/herself to a vocation or profession; the sixth cycle of seven years is spent under a restlessness that goads the individual towards impacting his or her environment through a major social contribution; the seventh cycle of seven years is spent in building a clear philosophy of life which the individual is eager to share with the world. Beyond the seventh cycle, other cycles of seven years only reinforce the individual's desire to share his or her life philosophy with those around him and the world at large (Lewis, 1986).

As a result of this phenomenon, many persons put together resources to set up non-governmental organizations to promote their own ideas of what life should be for the next generation. All well established schools of Adult Education (including the Department of Adult Education, University of Botswana) train in the processes and techniques of conceptualising, setting up and managing non-governmental

organizations. As the nomenclature suggests, non-governmental organizational set-ups are institutions that are run by persons who are not working for governments; as such they are run and guided by the philosophy of the individual or group of individuals that set them up. While all non-governmental organizations remain independent of government control, they nevertheless operate within the laws of the various lands in which they operate and seek to promote the greatest good possible as conceived and advanced by their founders.

In addition to all practical actions they take to improve lives in societies, all non-governmental organizations are involved in facilitating learning of all sorts, using non-formal and Adult Educational principles and techniques of flexible teaching, conversational engagement, empathetical interaction and encouraging support.

Yet, another way of dying well is to spend the little time that may remain to achieve some concrete realizations with the view to immortalising an idea, a historical fact or artifact. As Lynn, Harrold and Schuster (2011) suggest, the tendency is usually to write off persons thought to be in their last days on earth as being incapable of productive activities; yet, the last days of departing souls are usually so intensely occupied that they may be turned into very fruitful and worthwhile periods. Within the caring hands of nurses specially trained to care for the terminally ill, by the side of the patient counselor and before the non-formal education facilitator, these terminally ill or terminally old persons have been helped to actualize their last great achievements or wishes.

All these conditions and ardent desires and wishes to fulfill certain feats towards the close of an incarnation arise from natural tendencies and the Adult Education facilitator does nothing more than assist in

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actualising a natural desire. A French philosopher was he who philosophically put the finger on the source of this natural tendency of all human beings to adjust a thing or two before they breathe their last breath. The philosopher in a meditative mood and after contemplating human beings' reactions towards life torments, anguishes and unfulfilled dreams, said "*Si jeunesse savait*" (Had the youth known!) and "*Si vieillesse pouvait*" (Were it possible for the aged to automatically relive his life all over, or as it were, rewind the hands of the clock!).

Had the youth been aware of the full unfortunate consequences into which their actions would have resulted, many erroneous steps taken and actions indulged in during youthful days would have been avoided. Unfortunately, these actions have been taken and during old age, the frustrating and annoying consequences of those steps taken many years back are starring the youth of yesteryears who has become the aged of today, in the face. Were it then possible to undo those same acts, the aged would have gladly undone them for the purpose of getting rid of the current nefarious consequences of his earlier mistakes.

In each of these situations, valuable lessons are learnt, the cumulative effect of which impacts greatly the last stage of the human being's life. In this sense, learning gathered in this way is related to an individual's last education.

While the facilitator of Adult Education does not claim any monopoly of knowledge or accumulation of large knowledge, he or she has been trained in the techniques of helping individuals or groups of individuals to learn outside the formal school system.

In addition to other requirements, Ellis and Richardson (2012) for example submit that the following are important standard performances demanded of adult educators: i) the ability to identify learning needs of adult learners or whole communities ii) the ability to create awareness of and apply problem solving techniques with learners iii) the ability to design activities suitable for use in Adult Education and iv) the ability to promote lifelong learning.

The adult educator therefore possesses the corpus needed for the promotion of the last education that is so important to all human beings on earth.

ADULT EDUCATION AS PROCESS OF LIVING

Whether it be the "first" or "last" education, Adult Education is intrinsically linked to living in general. Apart from formal education (purposely designed to address about 20% of man's educational needs), the whole of life and living is rested on Adult Education (informal, non-f0rmal, flexible formal education and lifelong learning).

In this sense, Adult Education is not only important to life and living, it is an indispensable tool for successful and happy living. An analysis of the manner in which the educational needs of man is supplied through life shows that Adult Education supplies about 80% of the education needed by the individual to go through life in a way that is not only balanced and useful but in a way that is satisfying and congenial to the principles of living.

The waves of change

It was Alvin Toffler (1991 a, b, c) that alerted the world of the leaps in refinement that mankind has made since sedentary living had become accepted by the human race more than 10,000 years ago. He submits that three major waves of change have so far swept through the world; the first wave he describes as the transition from nomadic to sedentary life style; the second wave, he portrays as having been characterized by the advent of the machine and it is located within the Industrial Revolution era that began in Europe in the 18th century; the third wave of change, he names the Information or Knowledge age.

Sedentary life style was encouraged by the domestication of the fruits and vegetation upon which the former nomadic persons were feeding; the outcome of the domestication process of those plants and fruits is symbolised today by the development of agriculture in its many varying forms (pastoral agriculture, aquaculture, crop production, etc.). With man's ability to produce his own food in abundance in one place, came the desire to settle and to establish villages and towns (McNeil, 1971).

The Industrial Revolution came to revolutionise agriculture by introducing mechanised production of agricultural produce; this process in turn increased food production and made agricultural produce available beyond the limits that were originally imaginable. Consequently, human population exploded and a larger surface of the earth got occupied within a shorter time than it would have been imagined prior to the Industrial Revolution. Additionally, human lifestyle developed along complex and sophisticated lines that were previously unknown and untested (Herberman, 1984).

The consequences of Industrial Revolution led to knowledge explosion and to further expansion of human settlements that are now in need of

means to contact one another for the purpose of cooperation and collaboration with the view to ensuring human security and safety. The third wave of change provided these opportunities through not only the invention of means of communication that turned the earth place into a global village wherein everybody no matter how far removed by distance can be contacted instantaneously but also through the ever increasing generation of knowledge aimed at making living more and more facile (Drucker, 1993).

If Toffler (1991 a,b,c) had predicted the three human developmental ages that we have already experienced virtually in full, it is still the Tofflers (2011) (Alvin Toffler and Heidi Toffler) that have predicted the fourth wave or fourth age of human development. The fourth wave, they named "Revolutionary Wealth". It is an age in which the "institutions that once lent coherence, order and stability to society now flail about in crisis" (Toffler and Toffler, 2006).

These institutions that were predicted as about to begin to "flail in crisis" include financial institutions such as commercial banks, investment banks and even banks run by religious organisations; they also include the marriage institutions in various human societies; they include religion, as a phenomenon and institution that has for a long time provided answers and solace to scores of people; they equally include social organisations that were once respected and highly regarded not only by the efficiency in which human affairs were conducted within them but also by the acute sense of morality, justice and fair play by which actions were dispensed. Alvin Toffler and Heidi Toffler by the close of the 20th century predicted that all these institutions will begin to fail man by showing glaring inability to meet the expectations of the average human being.

Already, many of these predictions have come true. While we are yet to live through Tofflers' fourth wave fully, we already know, that the prolonged financial crisis which the world has been experiencing since 2008 is the result of the failure of not only banks but the failure of the most trusted banks on earth to live up to the oaths that have sworn. We know too that marriage as it was known and as an institution of social stability has not only departed from its basic concept, it has also assumed dimensions which numerous human beings are struggling to come to terms with. Religion is also not able to comfort large segments of human societies as it used to. Consequently, worship houses are turned into public entertainment places by the drones and numerous people, especially the youths have begun to satisfy their inner yearnings through transcendental means known under varied names (Yoga, Mystic life style, Jahism, etc.). While it is not surprising to see banks fail massively in some parts of the world that are judged low in organizational sophistication, the world did wake up in the first decade of the 21st century, to the choking reality that monies stacked away in known exceptionally efficient societies could disappear and that numerous persons across the world could be badly affected by the dishonest handling and management of their entire life savings.

Yet, the world had been greeted by a fifth wave which the perspicacity of the Tofflers neither foresaw nor detected. Indeed, all thinking beings and all intelligence organisations the world over were both jolted and rattled by that phenomenon that has come to be known as "Arab Spring". All persons, like this author, that had lived and shared the lives of persons living in the cultures currently affected by "Arab Spring" would concur that it must have taken a providential will to experience the tearing down of the curtain similar to transformation of the socialist-communist structure experienced at the close of the 20th century. So closed up and so stout were the structures designed to keep the status

quo in Arab Spring prone communities that the tearing down of the closely-knit system of administration in those communities took everybody by surprise.

Each of these waves has its educational implications. For example, the transition from nomadic to sedentary life style was aided through a slightly improved human capital in the areas of food harnessing techniques (identification of seeds, planting, harvesting and storage techniques), architectural conception and organisation and administration of human society. The passage from rural living to industrial lifestyle was not an easy one as scores of human beings had to overcome practical difficulties by acquiring both knowledge and skills that were to enable them function within the new societies that machines were creating. Most of these knowledge and skills were acquired through functional literacy education programmes offered in mechanic institutes, evening liberal classes and in factories (Fieldhouse, 1996). Similarly, the transition from industrial age to the knowledge age called for mental, psychological and practical adjustments both at personal and societal levels. The knowledge age brought education to the fore like never before and the development of human capital became the focus for all nations as the neglect of this endeavour would relegate a society to the background. The promotion of universal primary education, universal basic education, out-of-school education, education for the socially marginalised and non-formal training programmes became the norms throughout the last two decades of the 20th century in all societies.

The fourth wave of change seems to be the one that has put the greatest strain on a vast majority of people because it impacted in a negative way the very essence of being of a great number of people and the inner rock upon which many a society have built stability for

centuries. Up until the present moment, a great number of people and societies are not still able to fathom the logical reasons that would bring a man to marry a man or a woman to marry a woman. In the fourth wave of change the deepest beliefs held by individuals and societies are being put to stiff test and many are both internally and mentally agitated.

Yet, life must go on and many nations and organisations are currently putting together relevant sexuality and religious tolerance educational programmes with the view to helping citizens in the world to cope with the changing times. Financial literacy education programmes and newer financial management culture are equally being evolved with the view to smoothening up the transition from the third to the fourth wave of change.

Yet, Tofflers' waves of change were not the only major revelations of the 20th century that attracted mega educational projects in the attempt to protect mankind and to prepare it to meet predicted harmful conditions with informed equanimity. The millennium development goals (MDGs) constituted also a programme of great necessity that engaged the attention of the most important persons and organisations in the world and that took Adult Educationists back to the drawing board.

The Millennium Development Goals

Having reviewed the conditions of the world during the twilight of the 20th century, about 193 United Nations member states developed the Millennium Development Goals (MDGs) (Wikipedia, 2012) as a means of propping up a sinking humanity and as a way of giving all living beings and non-living entities, a new sense of brotherhood and partnership.

Eight millennium development goals were spelt out and targets and indicators of levels to attain by 2015 were spelt out as shown in the below extract culled from Wikipedia website:

Goal 1: Eradicate extreme poverty and hunger

- **Target 1A: Halve the proportion of people living on less than $1 a day**
    - *Proportion of population below $1 per day (PPP values)*
    - *Poverty gap ratio [incidence x depth of poverty]*
    - *Share of poorest quintile in national consumption*
- **Target 1B: Achieve Decent Employment for Women, Men, and Young People**
    - *GDP Growth per Employed Person*
    - *Employment Rate*
    - *Proportion of employed population below $1 per day (PPP values)*
    - *Proportion of family-based workers in employed population*
- **Target 1C: Halve the proportion of people who suffer from hunger**
    - *Prevalence of underweight children under five years of age*
    - *Proportion of population below minimum level of dietary energy consumption*

Goal 2: Achieve universal primary education

- **Target 2A: By 2015, all children can complete a full course of primary schooling, girls and boys**
    - *Enrollment in primary education*

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       o   *Completion of primary education*

       o   *Literacy of 15-24 year olds, female and male*[7]

Goal 3: Promote gender equality and empower women

- **Target 3A: Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015**
    - o *Ratios of girls to boys in primary, secondary and tertiary education*
    - o *Share of women in wage employment in the non-agricultural sector*
    - o *Proportion of seats held by women in national parliament*[8]

Goal 4: Reduce Child Mortality Rate

- **Target 4A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate**
    - o *Under-five mortality rate*
    - o *Infant (under 1) mortality rate*
    - o *Proportion of 1-year-old children immunised against measles*[9]

Goal 5: Improve maternal health

- **Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio**
    - o *Maternal mortality ratio*
    - o *Proportion of births attended by skilled health personnel*

- **Target 5B: Achieve, by 2015, universal access to reproductive health**
    - o *Contraceptive prevalence rate*
    - o *Adolescent birth rate*
    - o *Antenatal care coverage (at least one visit and at least four visits)*
    - o *Unmet need for family planning*[10]

Goal 6: Combat HIV/AIDS, malaria, and other diseases

- **Target 6A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS**
    - o *HIV prevalence among population aged 15–24 years*
    - o *Condom use at last high-risk sex*
    - o *Proportion of population aged 15–24 years with comprehensive correct knowledge of HIV/AIDS*
    - o *Ratio of school attendance of orphans to school attendance of non-orphans aged 10–14 years*

- **Target 6B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it**
    - o *Proportion of population with advanced HIV infection with access to antiretroviral drugs*
- **Target 6C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases**
    - o *Prevalence and death rates associated with malaria*
    - o *Proportion of children under 5 sleeping under insecticide-treated bednets*
    - o *Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs*

- o *Prevalence and death rates associated with tuberculosis*
- o *Proportion of tuberculosis cases detected and cured under DOTS (Directly Observed Treatment Short Course)*[11]

Goal 7: Ensure environmental sustainability

- **Target 7A: Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources**
- **Target 7B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss**
  - o *Proportion of land area covered by forest*
  - o *CO_2 emissions, total, per capita and per $1 GDP (PPP)*
  - o *Consumption of ozone-depleting substances*
  - o *Proportion of fish stocks within safe biological limits*
  - o *Proportion of total water resources used*
  - o *Proportion of terrestrial and marine areas protected*
  - o *Proportion of species threatened with extinction*
- **Target 7C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation (for more information see the entry on water supply)**
  - o *Proportion of population with sustainable access to an improved water source, urban and rural*
  - o *Proportion of urban population with access to improved sanitation*

- **Target 7D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum-dwellers**
    - *Proportion of urban population living in slums*

Goal 8: Develop a global partnership for development

- **Target 8A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system**
    - Includes a commitment to good governance, development, and poverty reduction – both nationally and internationally
- **Target 8B: Address the Special Needs of the Least Developed Countries (LDC)**
    - Includes: tariff and quota free access for LDC exports; enhanced programme of debt relief for HIPC and cancellation of official bilateral debt; and more generous ODA (Overseas Development Assistance) for countries committed to poverty reduction
- **Target 8C: Address the special needs of landlocked developing countries and small island developing States**
    - Through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly
- **Target 8D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term. (Wikipedia, 2012)**

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While some amount of financial and material support is to be mobilised towards the resolution of the issues thrown up by the Tofflers and the millennium development goals, education remains the main tool identified with which the changes can be meaningfully confronted.

All the types of education employed in these various projects are Adult Educational in nature. Even those education goals that target children and the youths will not succeed unless the support of adults is enlisted. Adults themselves will not support anything that they do not understand or believe in. to bring them to believe in a valuable cause. They need to be conscientised. Conscientisation is a process of information sharing that aims at helping those involved to critically examine all aspects of a phenomenon with the view to taking personal or collective decisions that lead to praxis or action.

In the words of Freire Institute (2009),

Conscientisation is the process of developing a critical awareness of one's social reality through reflection and action. Action is fundamental because it is the process of changing the reality. Paulo Freire says that we all acquire social myths which have a dominant tendency, and so learning is a critical process which depends upon uncovering real problems and actual needs (Freire Institute, 2009).

The process of conscientisation is an Adult Educational process. If the will of adults must condition success within children and youths education in the way it is discussed here, it is then implied that the success of children and youths education programmes are contingent upon the education of parents or upon Adult Educational.

Another phenomenon that tends to "Adult Educationalise" children and youths education programmes is that, life being dynamic and school hours being limited, a number of survival techniques and important pieces of information are usually accessed by children, youths and adults in a most informal way (through bill boards, museums, cinemas, libraries, etc..). But what is Adult Education?

MEANING OF ADULT EDUCATION

Adult Education is a knowledge area that was impelled by the need to understand the behaviour of a special group of students.

It was in the early days of the 20th century. The Industrial Revolution had been going on for a little more than a century. However, the gathering momentum of the revolution and especially the speed with which new machines and new social and economic norms were being adopted and officialised had become too destabilising to a great many people that were mainly peasant and persons of humble social background. A few members of the academia who had observed for a few years the bewilderment and psychological difficulties that many people were experiencing decided to step out of their ivory tower institutions and to organise some learning outside of the walls separating their universities and the common people. They were mainly, sociologists, psychologists, scientists and economists. They were not trained teachers and for the purpose of preparing for their self-imposed assignment, they chose to acquaint themselves with the theories that existed within the teaching profession. This way, they hoped to discharge honourably and creditably their new teaching role. This new type of teaching, they differentiated from their type of teaching within their respective universities mainly because the type of students they were out to help

were mainly unschooled peasants struggling to comprehend and adjust to the new socio-economic dispensations being created by the industrial revolution (Peters, Jarvis and Associates, 1991).

These academics therefore read many books discussing Educational Psychology, Sociology of Education, Teaching Methods in Economics, Agriculture and other such school-based subjects. They consequently learnt much about students' motivation and perception and they picked up a number of psychological tricks for motivating students to learn. Having satisfied themselves of their readiness to commence their work, they embarked earnestly on their extra-mural (beyond the walls) educational work. They hoped to positively impact many lives and to bring succour and psychological comfort to multitude of peasants and persons of little means. They were enthusiastically received by the crowds of farmers and artisans they met initially. These crowds listened with avidity to their explanation about the circumstance (the industrial revolution) that was responsible for their difficult situation. The crowds asked many questions and wished to know more about the Industrial Revolution.

However, when it came to systematic learning aimed at equipping this group of students with knowledge and skills to resolve the many challenges posed by the Industrial Revolution, these academics did less than succeed. They found out to their dismay that many theories of teaching they had learnt and which they had diligently applied did not work. They found out for instance that the motivational techniques they had applied had not yielded the desired result. While it was correct to assume that there existed a number of things which the populations did not understand about the Industrial Revolution, these populations had clear views about how the effects of revolution ought to have been

managed. These views of theirs were not often considered necessary and useful within the process of teaching that the academic colleagues adopted then. Additionally, while in all cases, extrinsic motivation does play a great role in school based learning, non-formal education learners' intrinsic motivation is known to easily override external pressures and direct and impact learning in a way not known by formal school teachers. These pieces of knowledge were not at the time known to these academic colleagues and while they were initially enthusiastically received anywhere they went, they discovered that their crowds soon reduced by the drones until they found themselves alone in empty learning centres.

The health of the teaching-learning endeavour they promoted did not improve beyond their own knowledge over a number of years and they decided to make a special study of their own brand of students as a way of resolving the teaching challenges they met on the field. This decision to study the nature of their students heralded the birth of the discipline of known today as *ADULT EDUCATION.*

The first academic department for the study of Adult Education was established in the United Kingdom in 1920 (Peters et al, 1991). The main purpose for establishing the department was to research into the psychological, sociological and philosophical aspects of out-of-school learners and the dynamics of learning outside formal educational settings. The other task ascribed to that first department was the dissemination of its findings through the promotion of the study of Adult Education (Peters et al, 1991).

While the first department of Adult Education was established in the United Kingdom, it is the United States of America through its own first department of Adult Education established in 1930 (Peters et al, 1991)

that will become the greatest champion and promoter of the teaching, study and virtues of Adult Education in a worldwide sense. While great and famous publications such as the British NIACE or the German IZZ/DVV's are acknowledged, it is the American Association for Adult and Continuing Education (AAACE) that has since the 1960s published a succinct summary of the progress registered in the field of Adult Education every 30 years or less. This summary usually includes achievements recorded beyond the United States of America. The first such summary came in 1964 through the publication of *Adult Education: Outlines of an emerging field of university study* (edited by Jensen, Liveright and Hallenbeck) which was followed in 1991 by *Adult Education: Evolution and achievements in a developing field of study* (edited by Peters, Jarvis and Associates). The Adult Education corpus having reached an explosive dimension in modern days, the publication *New directions for adult and continuing education,* managed by Wiley on-line library, has now become a reliable yearly summary of the Adult Education body of knowledge.

Adult Education was therefore the first label and nomenclature allotted to the field of study under discussion. However, through a process of conceptual upgrading, "Adult Education" had assumed the nomenclature "Non-formal Education" and very recently the appellations "Lifelong Education" and "Lifelong Learning".

This conceptual upgrading of Adult Education was socially driven. If the discipline of Adult Education was born as a result of the Industrial Revolution induced social crises of the 18th and 19th centuries (Peters, Jarvis and Associates, 1991), the period lying between the middle of the 19th and the middle of the twentieth centuries, compelled large populations of people in Europe and many other parts of the world to

seek information and knowledge outside the school system in order to keep up and cope up with the rapid changes taking place around them; finally, as the human race moved into the middle of the twentieth century, it became gradually more apparent that if the modern man and woman must not be overrun by the biological, economic, technological, scientific, psychological and environmental changes that occur around him and her in a dizzying speed, s/he must seek learning not only outside the school system but all through life. This thinking gave birth to the concept that came to be known as "lifelong learning"(Field, 2006).

The concept, lifelong learning which simply implies learning from cradle to the grave, became especially popular in the 1970s. In a simple way, the following are different circumstances under which lifelong learning may manifest.

All human beings are born babies and all grow over time to become children, adolescents, young adults, middle-aged adults, older adults and aged persons. Each of these stages of human growth and each intervening period between each of the states of growth brings with it, its peculiar developmental issues, physical changes and feelings. For example, a girl growing into adolescence may wake up one day to discover that blood was flowing from her private part; a young boy growing into adolescence may discover that a semen he has never seen before began one day to drop from his reproductive organ; a middle-aged adult may suddenly discover that the acuity of his or her sight has substantially reduced; an aging adult person may come to discover to her surprise that aches which she has not been accustomed to have now taken possession of her body and would begin wondering how to manage these new phenomena which in the first place she has difficulties in understanding.

All these examples highlight the changes that occur within the human being as he/she grows on; each of these changes is capable of causing emotional stresses and psychological disorder in a number of people, if they are not able to understand the phenomena that have taken possession of their body and when they are not able to manage the new changes to the extent that they may gain back a large amount of the comfort they were used to with their own body. In order to relieve all human beings of the emotional stresses that sudden changes within their body may bring and in order to equip all persons with prior knowledge and skills to manage these developmental changes, lifelong education is recommended.

Since the dawn of civilization, human beings put forth diverse economic arrangements for the world. Each of these economic arrangements is said to be devised for the purpose of improving human beings' welfare. One thing however, which the introduction of each new economic order fails to emphasize is the effect of the change of order on the people of the world. Most people must have got so used to the older economic order that they may spend years to adjust to the new order. Indeed, some persons may have positioned their finances in such a way that the new economic order may only have come to make them lose money and financial opportunities; under such a condition, the new economic order has actually brought pain and suffering to these individuals upon whom many other individuals would have been depending.

In order to minimize pain and suffering caused by the introduction of new economic orders among people of the world and particularly in order to equip in advance citizens with skills and approaches to manage economic emergencies situations, lifelong education is recommended.

This type of education would not only enlighten the individual on the tenets of current and other economic orders, it would also dispense proactive education in the area of personal and corporate economic management.

All societies being dynamic, no society is static. While many social changes are desirable as they tend to move society forward in many areas of human endeavour, others are not so pleasant. In any case, whether we are talking of desirable or undesirable social changes, the process involved in changing a society from one stage to another brings along its pains. Consequently all social changes come with some pains. The pains of social change may be encapsulated within the factors that promote this change or they may be sought in the manner the people decide to react to the change.

A social change may originate from the behaviour of a large number of citizens who had been in contact with some foreign cultures which, on returning home, they decide to infuse in the home culture. A social change may also result from the constant beaming through television, satellite apparatus, radio or other means of mass communication into a society, of values and behavioural dispositions which eventually influence the psyche of the citizenry to the point that these values get adopted. A social change may equally be brought in through the angle of war; so that no society ever remains the same after a war has visited it; cherished values are often overthrown and new ways of doing things are often adopted as a result of the forced training which the period of war brings on all citizens.

It is the view of lifelong learning proponents that through education and learning, whole societies can be made to prepare for changes and to

adopt steps capable of enabling them to adjust very quickly to changes when they eventually come.

Thus far, the discussion of Adult Education has dwelt on historical and social considerations. However, Adult Education may also be viewed as system or sub-systems of education within cultural boundaries and/or within larger systems of education. For example one way of understanding the nature, purpose and structure of Adult Education is through the study of Traditional African Education.

Adult Education as Traditional African Education

Traditional African Education is education systematically designed and promoted for the purpose of sustaining society in various ways and under varying circumstances. While it may be graded, the curriculum contents of the grades are so neatly linked that it is difficult for any member of society to fall out of social norms. Yet, these same curriculum contents are made so flexible that at any point in time, new pieces of knowledge may be introduced into any grade, curriculum contents as circumstances demand. While the decision to add or subtract from any grade curriculum content remains the prerogative of the elders; all men and women within society constitute the facilitating work force and the whole society, the learning environment.

Much learning is picked up, albeit non-formally, by attending cultural displays, village square meetings and games and festivals organised periodically. Although there exists, a general assumption that some age brackets would be suited for specific levels of learning, age is not a barrier to the ability to accede to superior graded learning; consequently, where "a young one learns to wash his hands clean, he will be invited to dine with the elders" (Achebe, 1958).

The nature of education in traditional African society is lifelong and fairly open; education in traditional African society is equally one that does not create joblessness as it is both supportive and integrated within the labour structure of society. The purpose of education is to equip the individual with both civic education and survival skills that will enable each citizen to keep societal cohesion through his behaviour and utterances. The learning environment is the whole society and the corps of facilitators is made up of all the men and women residing within society. There is no age barrier to learning and the teaching-learning techniques employed in the promotion of Traditional African Education are those that enhance self-directedness and strengthen personal and collective willpower. Traditional African Education is therefore Adult Education par excellence.

However, like every living entity, Africa has had its own life experience and the turbulent and harrowing colonial encounters have transformed traditional African societies into modern African societies within which the practice of Adult Education is no more traditional but modern. As such, the structures and systems employed in modern Africa to promote Adult Education are different from those employed in traditional Africa; yet, the Adult Educational nature and spirit persist and inspiration continues to be drawn from traditional African Adult Education practice.

Adult Education as sub-systems of modern national education systems

Modern Africa, like the rest of the world has been hooked on monetary economics and living. In a world ruled by money, all societies are concerned with a good management of their Gross Domestic Product (GDP), Gross National Product (GNP), Human Development Index (HDI) and the like. National productivity is key to the health of these
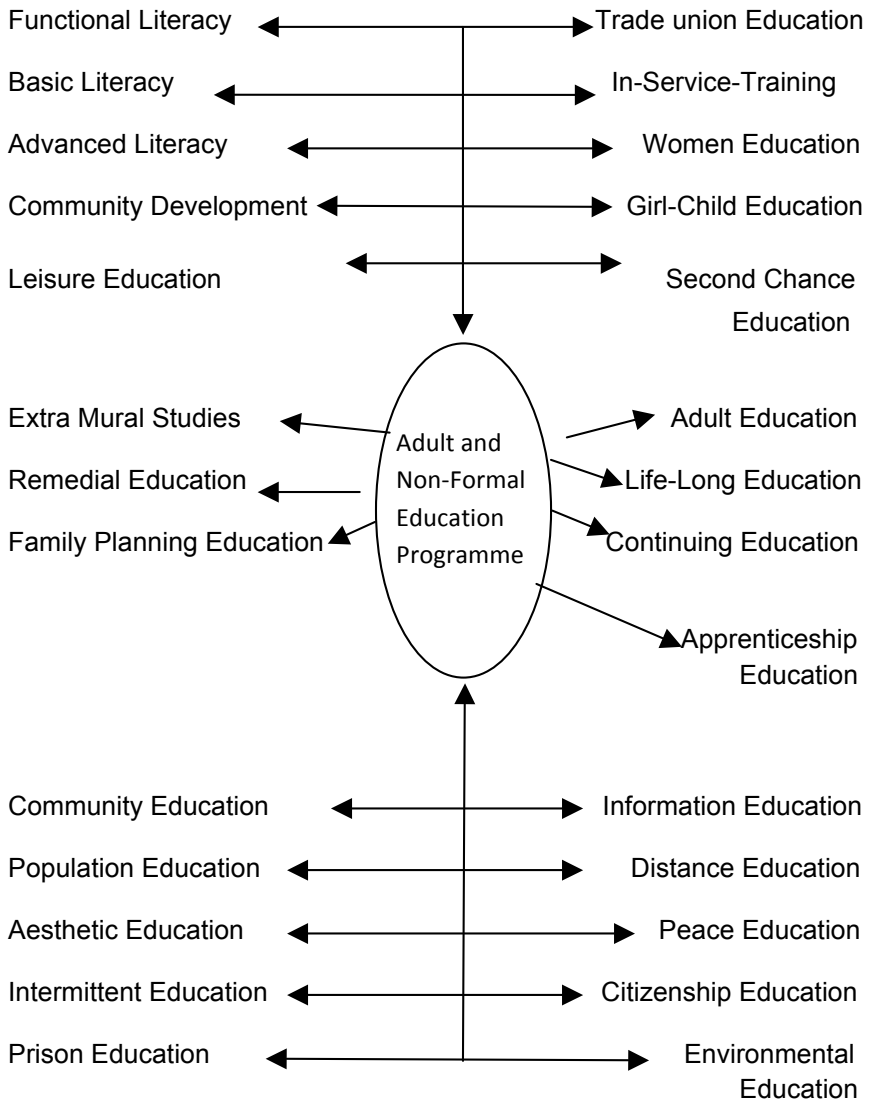
economic indicators and the higher the number and quality of citizens involved in productivity within national borders, the better and healthier is the productivity of a country likely to be.

Equipping as many citizens as possible with education and especially with economic development-relevant education is key to the economic wellbeing of nations. Yet, in some parts of the world, it has been noticed that large segments of populations are left outside the productive line because they are neglected and are neither educated nor trained to engage in some productive activities within their respective nations.

One way Adult Education has been used to correct this error and to bring these neglected national species into national productive arenas was through the establishment of educational subsystems within national education systems. In some cases, women have been the focus of these sub-systems; in other cases, out-of-school children, youths in Quranic schools, the physically challenged, orphans, victims of human trafficking and refugees have been clients to these educational subsystems (Torres, 2002; Biao and Biao, 1997).

Adult Education as Learning Programmes or Projects

One other way of describing Adult Education is through existing Adult Educational learning programmes. Discussing Adult Education using this format exposes the extensive nature of its scope. Akintayo's (2004) diagramme of learning programmes offered through the portals of Adult Education, as cited in Gusau and Okediran (2006) succinctly exposes the vast array of learning programmes on offer in adult and non-formal education as indicated in Figure … below

Functional Literacy ← → Trade union Education

Basic Literacy ← → In-Service-Training

Advanced Literacy ← → Women Education

Community Development ← → Girl-Child Education

Leisure Education ← → Second Chance Education

Extra Mural Studies ← Adult and Non-Formal Education Programme → Adult Education

Remedial Education ← → Life-Long Education

Family Planning Education ← → Continuing Education

→ Apprenticeship Education

Community Education ← → Information Education

Population Education ← → Distance Education

Aesthetic Education ← → Peace Education

Intermittent Education ← → Citizenship Education

Prison Education ← → Environmental Education

Source: Culled from Gusau, M .H. and Okediran, A. (2006) Facilitator and Non-formal education. A   paper presented at a UNICEF Universal Basic Education (UBE) workshop, Abuja, Nigeria   2006.
To this already long list of learning programmes, I should add political education, Quranic learners education, out-of-school boys education, workers' education and nomadic education.

- **Functional literacy:** Functional literacy education is a learning programme that aims to equip an individual or group of individuals with skills that enable the individual to function normally within a society. Such skills include basic literacy skills (reading, writing and numeracy) and any other skills (oral literacy, ICT, etc.) required for successful living within a given society.

- **Basic literacy:** Basic literacy education is a learning programme that seeks to equip the individual with the skills of reading, writing and numeracy using any given language.

- **Advanced literacy:** Advanced literacy education is literacy education that equips the individual with skills that go beyond those of basic literacy. It may also be referred to as post-literacy or any other appropriate nomenclature suiting the context.

- **Community development:** Community development is a learning process involving practical steps taken either by community members alone or with the assistance of external bodies aimed at bringing about tangible transformation of the community.

- **Leisure education:** Leisure education is a learning programme that equips the individual with tips as to how, when and where to

access and profit from leisure that is designed to uplift him and keep him in a state of equilibrium.

- **Trade union education:** Trade union education is a learning programme that offers opportunity to acquire knowledge and skills in matters of trade unionism.

- **In-service education:** In-service education is recurrent education that seeks to renew the skills of the individual by helping him to do away with outdated skills and take on new relevant ones.

- **Women education:** Women education is usually an eclectic type of education that aims to equip women with both basic education and skills that would enable them to contribute meaningful to the productive sector of national economies.

- **Girl-Child education:** Girl-Child education is a learning programme that provides girls with basic enough education to enable them appreciate their own personal worth in societies where girls are deprived of all rights. After the initial basic education that usually happens outside of the school system, girls are expected to cooperate with agencies and organisations wishing to help them attain further education.

- **Second chance education:** Second chance education is an educational package specifically designed for a person or group of persons who had earlier on missed the opportunity of receiving the said type of education.

- **Extra Mural studies:** Extra-Mural studies are learning programmes that higher education institutions, especially

universities, run outside the walls (murs) of their institutions with the view to assisting learners either to acquire requisite qualifications to become higher education students or to acquire qualifications granted by higher education institutions.

- **Remedial education:** remedial education is education offered for the purpose of remedying former learning deficiencies.

- **Family Planning education:** Family Planning education is a learning programme that informs about the consequences and advantages of child bearing and child spacing practices.

- **Continuing education:** continuing education is a learning programme that gives opportunity to continue one's learning project from where it was left off. It offers clear segments of the educational spectrum through which the individual may gain admission with the view to continuing learning.

- **Apprenticeship education:** Apprenticeship education is a hands-on system of learning that aims to equip the learner with skills in a chosen area of human endeavour.

- **Community education:** Community education is a pre-requisite for community development. It is a learning programme that seeks to either awaken or reinforce the senses of worth, independence and personal ability resident within the individual. A process such as this tends to raise individual and by extension, collective self-concept. All these qualities eventually positively serve the community in myriad of ways.

- **Population education:** Population education is a learning programme that seeks to enlighten the individual about the

dynamics that impact human populations generally but specifically the population within which s/he lives. The other aim of population education is to sensitise the individual about the consequences of these dynamics.

- **Aesthetic education:** Aesthetic education is a learning programme that seeks to awaken the sensitivity of the individual to beauty as it is found in nature and in the human being through exposing the individual to a number of relevant works.

- **Intermittent education:** Intermittent education is similar to continuing education in many respects.

- **Prison education:** Prison education is education dispensed within the walls of the prison whose aim is to equip the prison inmate with the knowledge that helps in keeping him out of the prison at the expiration of the term being served on the one hand and to equip him with relevant skills that will promote his reintegration within society.

- **Information education:** Information education helps the individual to acquire the skills necessary for accessing information, knowledge and skills needed for successful living.

- **Distance education:** distance education is educational programme that seeks to equip learners with knowledge and skills at a distance through a variety of media (print, electronic waves, etc.)

- **Peace education:** Peace education is a learning programme that highlights and employs all possible strategies to bring

learners to appreciate human interactive approaches that are susceptible to foster peaceful living, and peace in the world.

- **Citizenship education:** Citizenship education is a learning programme that brings the individual to appreciate his rights and responsibilities within the context of a social set-up. The goal of citizenship education is to promote social cohesion in a modern sense.

- **Environmental education:** Environmental education is a learning programme that aims to equip the individual with the knowledge of the working of ecosystems; it equally seeks to develop in the learmer, eco-friendly habits through the demonstration of how environmental rejuvenation projects may be carried out.

- **Political education:** Political education is a leaning programme that equips the individual with both the knowledge and skills needed to function efficiently within a chosen political system.

- **Quranic learners' education:** Quranic learners' education is a learning programme that seeks to integrate the Quranic curriculum with modern education curriculum with the view to facilitating the mainstreaming of Quranic school learners into the modern educational system.

- **Out-of-school boys education:** The out-of-school boys education is a learning programme that enables male youths to combine business with education. Negotiated periods of the days are usually retained when learning may be promoted among this category of learners without disrupting the business activities in which the learners are involved.

- **Workers' education:** workers' education is education that teaches workers about their rights and responsibilities within the context of their work place.

- **Nomadic education:** Nomadic education is a form of education that targets both the parent-nomad and the child-nomad. To the parent-nomad is taught skills for maximizing profits from his cattle rearing while the child-nomad is equipped with basic education through a system of out-of-school learning.

Adult Education as Liberating Education

It was Paulo Freire who, in the 1970s, took the world by storm with his lucid outline of the type of education that must not view the human being as an educational bank but a critical being capable of accessing information for the purpose of taking decision that impacts his or her life.

Although a number of authors (Biao, 2008; Babalola, 2007; Biao and Biao, 1997; Thompson, 1981) had in the past decried the incongruity and non-functionality of the type of modern education received by the populations of the developing world, it was Freire (1985; 1973; 1970) that lucidly outlined the weaknesses of a banking system of education and proposed the borders of a liberating type of education for the developing world.

The liberating type of education is the one that ought to transform the world, that is, make the world more humane. It is equally a type of education that ought to awaken people, especially those of the developing world to those things that are needed for survival and for liberation from the yoke of mental slavery.

Conscientisation, critical consciousness, dialectic, problematisation, praxis and empowerment are some of the terminologies used by Freire to explain his liberating education.

Conscientisation is a process of critical thinking that helps to break through a maze of constraints with the view to attaining a goal, that is, beneficial and liberating to the individual or group of people. Critical consciousness is a function of active thinking; he or she who must become critically conscious must be perpetually an active thinker. The process of dialectic consideration tends to juxtapose ideas with the view to sorting them out into their levels of relative usefulness; problematisation on the other hand is not the same as problem solving; it is a process of codification of realities that are critically studied with the view to penetrating their possible meanings and implications to either individual or collective life. Praxis implies action while empowerment implies collective agreement to act in a way that is not only mutually beneficial but collectively uplifting.

The process, contents and environment of liberating education as outlined by Paulo Freire are Adult Educational.

Andragogy

If the concept of liberating education is Freire's, it is to Knowles (1980) that the popularisation of "andragogy" is attributed. "Andragogy" that means "helping the adult to learn" is opposed to "pedagogy" which implies "leading the child to learn". Knowles (1980) submits that the five theories upon which the philosophy of andragogy rests include:

i. Self-directedness: as a person grows physiologically, biologically and psychologically, s/he tends to depend more on his or her own judgement than the judgment of others.

ii. Experience: as a person matures, s/he accumulates a growing reservoir of experience that becomes an increasing resource for learning.

iii. Readiness to learn: As a person grows and matures, his readiness is increasingly oriented towards the developmental tasks of his or her social roles.

iv. Orientation to learning: with physiological and psychological growth, a person's time perspective changes from one of postponed application of knowledge to immediacy of application and accordingly his orientation towards learning shifts from one of subject-centredness to one of problem-centredness.

v. Motivation to learn: As an individual matures, his or her actions and decisions are directed more by intrinsic motivation than by extrinsic motivation.

Heutagogy

Heutagogy has its roots in andragogy. However, if "andragogy" means helping individuals to learn, heutagogy implores facilitators to create learning environments that will enable learners determine the content and approach to their learning.

In a heutagogical approach to teaching and learning, learners are highly autonomous and self-determined and emphasis is placed on

*development of learner capacity and capability with the goal of producing learners who are well-prepared for the complexities of today's workplace. The approach has been proposed as a theory for applying to emerging technologies in distance education and for guiding distance education practice and the ways in which distance educators develop and deliver instruction using newer technologies such as social media (*Blaschke*, 2012).*

Yet, Adult Education is also something else. It is any of three forms of education, namely,
 i) Informal education ii) Formal Adult Education and iii) Non-formal education.

i). Informal education

Informal education may be conceived in two ways:

Firstly, it is a type of education that is not intentionally or purposefully planned but which nevertheless happens under the impulse of accident or providence. It is information, knowledge and skills that a person comes into without registering for any course. As a result of unsolicited experiences in life, some lessons are learnt. These types of learning and experiences are captured through various descriptions; in some cases they are referred to as "hard lessons learnt through unexpected and unsolicited experiences; in other cases where the experiences brought about an unexpected positive result or learning, the lessons learnt are happily and thankfully received with the statement "every disappointment is a blessing".

Secondly, it is a type of education that happens under such a relaxed atmosphere and within a constraint-free ambiance that education,

although planned and purposeful, may turn out to be great fun and leisure. Malcolm Knowles was he, who made popular this second notion of informal education as an Adult Educational concept. In explaining the context within which Knowles (1950) used the terminology "informal Adult Education", Smith (2002) submits that:

In focusing on the notion of informal education, Malcolm Knowles was pointing to the 'friendly and informal climate' in many adult learning situations, the flexibility of the process, the use of experience, and the enthusiasm and commitment of the participants (including the teachers!). He didn't define informal Adult Education-but uses the term to refer to the use of informal programmes and, to some extent, the learning gained from associational or club life. He commented that an organised coursed is usually a better instrument for 'new learning of an intensive nature, while a club experience provides the best opportunity for practicing and refining the things learned' (Knowles, 1950:25). Clubs are also 'useful instruments for arousing interests' (op.cit.) (Smith, 2002).

ii). Formal Adult Education

Formal Adult Education implies education conducted within the physical structure of the formal school in which the pedagogical safeguards (time-tabling, class discipline, the notion of teacher, teaching-learning techniques) have been fluidised or lowered to accommodate the physical and psychological dispositions of adult learners.

In other words, the Adult Education programme may be taking place within a secondary school or a college or a university environment and the qualification in view may in fact be one usually offered by a formal

secondary school or university, the time-tabling, teaching-learning techniques and the motivational techniques applied to advance learning will differ significantly from the ones usually relied upon within the formal school system. For example, unlike within the case of formal education, the time for learning will be mutually agreed on by both the institution or facilitator and learners; the evaluation process (examinations) will equally be negotiated to some extent and all aspects of the design of the programme, unlike in the case of formal schooling, will be participated in by learners.

iii). Non-formal education

Non-formal education, as the nomenclature suggests, is the opposite of formal education. In a broad sense, non-formal education would be any form of education that reduces significantly the rigidity usually associated with the school education system It is education that takes place outside the school system such as, short courses, workshops, conferences, round table discussions and dialogue. Formal education on the other hand refers to the physical structure and such elements as, the duration of the learning project, the end or qualification and the teaching-learning methods.

Having defined Adult Education in historical, systemic, sub-systemic and programmatic terms, it may be useful to offer at this juncture, a popular and easy-to-remember definition of this field of study.

In a most simplistic and basic sense, Adult Education is any education given or received by adults. But who is an adult? This question elicits no easy answer from adult educationists. This is because adulthood is determined by a myriad of parameters including chronological,

biological, physiological, social, legal, economic, historical, political, psychological, initiatory and aviational criteria.

Chronological criterion

Chronological adulthood refers to the age of a person; it points to accumulated years of existence on earth, when counted one after the other. In most societies, the older a person is, the greater the respect accorded him or her, not quite as a result of the mere accumulation of years of existence; but more because of the assumption that is attributed to old age, which is that the older a person is, the more likely he or she is, to have acquired the necessary experience and knowledge required to live a successful life. It is equally assumed that the wealth of experience of the elderly person would impact positively on the life of all the persons that he is responsible for or that he interacts with.

The age of a person is a valued gero-psychological criterion of adulthood more because of the positive values that it portends. However, the beginning of adulthood tends to differ from society to society. While onset of adulthood used to be set at age 21 during the 19th and a good part of the 20th centuries, beginning from the middle of the 20th century, the bar was lowered and 18 years became the reference age for the beginning of adulthood. By the beginning of the 21st century however, the age signaling the onset of adulthood is being gradually set to 16 years. In some rural areas of Africa and other developing countries, the onset of adulthood may be set even lower than 16 years.

Biological criterion

The process of biological adulthood is an inner process as it refers to the maturation process of the internal organs that makes a man out of a boy and a woman out of a girl; it is through biological maturation that the voice of a boy becomes more and more guttural; it is during this process that a boy earns an Adam's apple, armpit's hairs and pubic hairs. All these signs carry on simultaneously with a development of the reproductive organs to the level where the latter are able to function productively within the frame of natural human reproductive functions.

While a female child may not share the same internal organs with a male child, the inner maturation process takes the same pattern. It begins with the enlargement of the body structure from within, the growth of armpit hairs, pubic hairs, the beginning of menstrual cycle and it ends with the readiness of the reproductive organs to perform their reproductive functions.

While all these changes take place, the brain continues to grow too, both in size and in complexity by ensuring the proper functioning of the networks of nerves whose function is to facilitate the enthronement of emotional balance and stability at the level of each individual.

Physiological criterion

Unlike the biological criterion, the physiological criterion is an external maturation process; through the apparent state of a person's hairs, skin, face and general look, it is possible to qualify the level of physical maturation that has taken place.

Where a person's hairs are more grey than dark or blond, the natural tendency is to conclude that the person is closer to the upper echelon of physical maturity than to the lower echelon of maturity; a wrinkled face suggests old age while a smooth one suggests youthfulness. Thus within the public perception, there is an acceptable range of looks known to be those of children, youths or adults; as a norm, then, all descriptions of persons are made in reference to these public perceptions.

Unfortunately, where illness or other non-permanent conditions bring a person to look like a child, an adult or a youth, the illness or condition back of the look may not always be suspected and a person may therefore wrongly be said to be either young or old when in actual fact, he is not.

Be that as it may, the physiological criterion lays emphasis on the external factors of adulthood.

Social criterion

A social set-up is made up of more phenomena than human beings; it includes other living and non-living things that share the spatial environment with man. Although social set-ups are complex and are made up of many phenomena, they are ruled over by human beings and human beings are the forces that give them their direction and orientation.

Each society has norms which, in addition to other things, include socially approved roles and functions for different segments of the society. Apart from sex roles that are divine and natural (child bearing,

breastfeeding, ability to put in a family way), there exists gender roles that remain socially sourced and within this context, societies, the world over, recognize roles for children, youths, women and adults such as, the roles of human reproduction and production of goods and services are acknowledged as adult roles.

Any person therefore, that performs these and similar adult roles, irrespective of his or her age, status or station in life, is usually accepted as an adult in all societies.

Legal criterion

All human societies are governed by either written or unwritten laws or a combination of both. In addition to all other prescriptions, the laws in all societies prescribe who should be handled as an infant, adolescent, adult and as an old person. These prescriptions are usually descriptive and they carry clear characteristics which in law, identify each category of persons. Equally, these laws usually highlight the activities which each category of persons may lawfully engage in or may stay away from.

Any person who, lawfully indulges in activities known to be adult activities, is accepted as an adult person in a legal sense, even if any other shortcomings may be known to him or her.

Economic criterion

Socially productive activities are also known as economic activities. While it is true that all productive activities do not necessarily imply financial transaction and accumulation of money, most of modern living

style involves money and the reality of globalisation has even made the world more money conscious than ever before. Thus a person that is able to demonstrate economic ability, that is, one that indulges in such socially productive activities from which he or she reaps abundant economic rewards is viewed both as a useful member of society and as an important modern person.

The reasons for these postures are not farfetched. Since activities involving money have become so important to human survival and enjoyment, any person possessing money has come to be seen as someone that may be able to assume responsibility for the survival, maintenance and nurturing of both himself and others; such a person, who is not only productive but who uses the modern means of economy (finance or money) to maintain and nurture life is accepted as adult.

Consequently, any person, irrespective of age and sex who maintains himself and others out of his or her economic activities is accepted as an adult.

Historical criterion

Before the current age in which the whole world has been turned into a global village through the means of Information Communication Technologies (ICTs), oral civilisation used to be of primordial importance.

Oral literacy usually enables an individual to play the role which reliable recording instruments play; those of storing and recycling information whenever and wherever it is needed; however, in addition to recording events, the human oral historian is able to process and stress aspects of

oral history in accordance with circumstances and occasions; an oral historian is usually able to supply eloquent account of the history of whole communities stretching through centuries or even millennia.

In Africa, oral literacy is an old vocation which has its own guardians, trainers and High Council. When a member of its High Council passes through transition, Hampate Ba (2004) says it is as though a whole library has gone up in flames by virtue of the accumulated knowledge that these historians possess. Even in the developed world where Information Communication Technologies rule, demonstration of oral literacy is a sign of rare human abilities.

Oral literacy therefore is a spectacular human ability that is highly prized and appreciated even during this modern age. Only adult persons are known to achieve the feats of oral historians hence, any person capable of demonstrating the talents of oral historians, is referred to as an adult at least in a historical sense.

Political criterion

Man is a political animal in the sense that, wherever two or more human beings meet, they begin to think of ways of organising themselves and their activities in ways that will make for orderly conduct and bring about greatest human advancement. Consequently, wherever a human society springs up there follows a development of systems of governance whose objectives are to ensure the steady progress towards the establishment of a political culture that will be enduring and beneficial.

Adult persons are usually trusted with the responsibility of developing this political culture; the responsibility itself is usually carried out through accepting to serve in political positions or through playing the role of king makers either through popular or selective participation. The survival, dignity and integrity of whole societies are dependent on the nature and quality of the political system they run; as such, political responsibilities are revered and honoured responsibilities which no society toys with.

Political process in all societies is usually a gigantic machinery with its aberrations, controversies and trappings. All that must participate in this process must be equipped with not only life experience but also with the experience of the sages and villains alike. Politics and politicking therefore are not kids' games and this is why adults are usually entrusted with the responsibility of running political affairs. Interestingly, any person who is found within the political machinery, irrespective of age or sex, is accepted as adult.

Psychological criterion

Psychological attributes stem from innate dispositions which are overtly expressed through behaviour. Fear, powerlessness and protection seeking are for example some of the inner dispositions known to children. To qualify for psychological adulthood, different inner postures are expected. Consequently, a person that exhibits traits of tolerance, cool headedness, sensible bravery and balanced judgement tends to be viewed as being different from a child and as qualifying more as an adult.

This view is not without its foundation; all the aforementioned characteristics that are attributed to adults have their merits within the framework of human and societal survival and they tend to rank highest on the ladder of human virtues in all societies. For example, a tolerant person will not engage in wanton destruction of lives and property and therefore will, at all times, promote the continued existence of the human race; the cool headed person is not the one that may lose his temper easily. By being able to keep his or her emotions within bounds, the person is fortifying his or her mental and physical health and he or she is bringing little disturbance to the emotional world of those around him or her. Additionally, a sensibly brave person is one person who puts his or her life at risk only when such becomes most necessary; and since conditions demanding heroic acts are not frequent, he or she stands the chance of living long enough to use his or her life for more productive activities; a person with a balanced judgement is a person of peace as his or her tendency tends to avoid crises.

Little wonder then, that adages that highlight psychological attributes abound in all human societies; these adages include popular statements such as "Only the meek and patient one succeeds in assuming positions of leadership among the Hausa"; " speech is silver but silence is golden" and "unnatural deeds do bring unnatural problems".

The adult, in a psychological sense therefore, is that person that obeys the psychological prescriptions described here.

Initiatory criterion

Specifically in Africa and in some other developing countries, adulthood is attained through initiation into identified social groups and, admission

into these groups may be either by acts of circumcision and/or through performance of other heroic acts. The oaths that are taken within the process of initiation into adulthood constitute the indelible signature of the candidate and the expressed strength of his or her will in abiding to the demands of the status of adulthood.

Aviational criterion

The aviation industry is one of the industries that have the tendency of making adults out of persons that would normally have been considered children and youths. Any person aged 12 years for example, is requested to pay adult fares any time he or she is to travel by air. The rationale for this prescription is mainly economic and it has implications for the space that is taken up by the youths aged 12 and below 18 years as compared with that taken up by adult persons. Furthermore, the prescription has implications for the insurance rates and taxes payable on youths aged 12 and 17 years as compared with the rates payable in the case of established adults.

Persons aged 12 and below 18 years enjoy the same service from the aviation industry as older persons do and, on this basis, adulthood status is conferred on these youths with expectations that these youths while within the aviation domain will carry themselves with minimal adult decorum.

In summary, it must be stated that while criteria usually employed for determining adulthood have been discussed here as possible single determinants of adulthood, it is doubtful whether in practice, only one criterion is used to determine adulthood because, while a society may appoint a given age as adulthood age, that society would tend to rely

on more than mere chronological age before finally deciding issues concerning adulthood status. Consequently, the adult is on one hand, a person that shares at least one of the characteristics of adulthood discussed here and on the hand, any person that is accepted as adult by the community or society in which he or she lives, whatever may be the criteria relied upon by the said community or society.

ADULT EDUCATION AND THE FUTURE

The world, developing countries and Africa currently face social and economic challenges. The ability to identify these challenges and chart ways of confronting them will guarantee a stable future for all.

One of the challenges they face is crisis in the educational arena. In addition to issues of reduced budgets for education the world over, is the discussion of relevance of the types of education being offered. In developing countries and Africa there are the additional issues of inability to combat emerging diseases, to uphold gender equality and to attain an appreciable level of human development index.

Yet, Adult Education may be a useful instrument in providing solutions to each of these challenges through the boosting of the provision of basic education, the prodding of African universities for the delivery of development-relevant education and through using a combination of literacy education and indigenous knowledges to advance socio-economic development.

Boosting Basic education provision

Goal 2 of the Millennium Development Goals (MDGs) is the achievement of universal primary education by the year 2o15 with the

targets of enrolling all children into primary schools, supporting them to complete their primary education and providing 15-24 year old that are outside the school with basic literacy skills.

While primary education is a part of basic education, it is not in itself basic education. In addition to primary education, some learning that would equip learners with useful social and vocational skills is needed to qualify an education typology as basic education. In order to satisfy this condition, some nations have combined their primary education programme and junior secondary school programme into an educational segment which they have christened basic education.

Goal 2 of MDGs provides for the education of persons aged 5-24 years only. However, majority of the parents of primary school students are older than 24 years. Unless these parents are taken along and taken into confidence, the dream of universalizing primary education especially in Africa, will not be realised. A parent that is not convinced of the benefits of sending his children to school, will hold his children back; where he is initially coerced into sending them to school, he will ultimately withdraw them before completion. The need is pressing therefore to conscientise parents on the need to send their children to primary schools.

However, what percentage of African parents do we hope to convince to release their children for a primary education that holds no employment prospects to either the children or the parents? How many parents do we hope to convince to send their children to school when out of the about 50% of the Sub-Saharan African children that find their way into primary schools (UNESCO, 2011), only about 50% of them get placement into secondary schools (UNICEF, 2010) and only about 6% of those who go to secondary schools get a place in tertiary institutions

on the continent (UNESCO, 2011; Tilak, 2009)? What percentage of the African parents do we hope to convince when about 40% of the 6% of the African youths that receive tertiary education remain jobless for years (www.africaneconomicoutlook.org)?

Indeed, after more than two decades of concerted world effort at bringing Sub-Saharan Africa to improve its performance in the area of primary education provision through the promotion of the Education For All and Millennium Development Goals projects, the result is that:

> *Sub-Saharan Africa is home to 43% of the world's out-of-school children, levels of learning achievement are very low, gender disparities are still large, and the learning needs of young children, adolescents and adults continue to suffer from widespread neglect. After much progress in increasing government investment in education, the financial crisis has reduced education spending in some countries and jeopardized the growth in spending required to achieve EFA in others…(UNESCO, 2011).*

Wouldn't Africa at this juncture, then use Adult Education to supplement world effort at improving its supply of education? Wouldn't African universities that have not equally fared better, seize the vast educational opportunities offered by Adult Education to both prop up their own image and help African populations to become more productive?

Adult Education as leverage to African universities' performance

From the onset, it is useful to put in perspective, the performance of African universities throughout these past two centuries, the first African university having been established in 1829 (Wikipedia). While the

following discussion uses terminologies such as, "higher education" or "tertiary education", it is to be understood that the focus is on African universities. Although higher or tertiary education may include Colleges of Education and Polytechnics, the research results relied upon in the ensuing discussion apply more to universities than to any other types of tertiary education.

The summary of research findings has revealed that i) estimated rates of return on primary and secondary education are higher than those on tertiary education in Africa; ii) indeed a declining rate of return by increasing levels of education has been reported and iii) public expenditure per student as a percentage of GDP has been found to be higher in the case of higher education student than in the case of primary and secondary school students (Psacharopoulos, 1980; Thompson, 1981; Friedman and Friedman, 1980).

Additionally, it has been found that iv) African higher education tends to produce more graduates than are needed by the African labour market partly because most of the graduates are equipped with skills not required by the market; also, v) compared with salaries of lecturers in wealthier countries of the West, African lecturers' salaries are much higher when assessed against the grid of average per capita income and vi) as a result of internal inefficiency, a higher cost is being incurred in running higher education in Africa than in much wealthier countries (Anho, 2011; Babalola, 2007; Thompson, 1981).

In addition to all these findings, it is also known that only between 6 to 7% of all qualified candidates get placement in African tertiary institutions (Tilak, 2009) while the teaching-learning of courses is carried through more in theoretical than practical ways.

In summary, not only does African higher education serve a negligible proportion of the populace (about 1% if it is estimated that potential tertiary education learners constitute a quarter of the population), this level of education has not contributed in any noticeable way to the socio-economic development of the continent these past two centuries.

The poor performance of African higher education is the direct result of a high expectation of returns on investment before the structures that may guarantee such a result have been laid. In the words of Hoselitz in Thompson (1981),

> *..the countries in which returns to investment in human resources had been found to be high possessed five sets of common characteristics. First they had highly developed economies with negligible or tiny subsistence sectors and highly important exchange sectors. Secondly they had highly diversified occupational structures with a considerable degree of specialization and hence with substantial need for elaborate training programmes. Thirdly they had relatively full employment and efficient labour markets. Fourthly they had highly developed communication systems dependent on assumed universal literacy. Fifthly they displayed a high degree of social and occupational mobility yet with sufficient stability as to ensure a strong correlation between a training an individual might receive and the career which he might actually pursue (Thompson, 1981:95)*

Apart from South Africa that may come close to fulfilling these five conditions, no other African country may be said to be within this category of countries. Consequently, for now, no African university is

capable of delivering high returns on investment made on it. Yet, an African institution that touches the lives of only about 1% of the total population and is able to serve only about 7% of its qualified and potential beneficiaries, is not only a white elephant project but a waste of the lean resources of the continent. An African learning outfit that teaches curricula contents that may not be put into practice within the African milieu is doing nothing but proclaiming its status of ivory tower within which, it remains out of touch with the realities surrounding and submerging it. An African think-tank that will not focus its thinking on developing strategies with which to confront and solve the major social, economic and emerging problems of the continent, is a wasted talent.

The discussion and recommendations that follow take their rationale and raison d'être from these critical views about African higher education. While not diminishing the teaching and research missions of African higher education, the discussion here lays emphasis on the Adult Educational mission of universities and reminds them of the availability of Adult Education in helping them to begin to put in place structures (diversified occupational structures, full employment, literacy, etc.) similar to those that have aided other societies to attain educational and economic emancipation.

Two ways in which African universities may take advantage of Adult Education to bring about the envisaged emancipation of the African environment are through the promotion of community engagement and open and distance learning.

- **Community engagement and Open and distance learning**

The adoption of "Community engagement" in academic circles was preceded by the use of the terminology "community service" which Lulat (2005) views as:

> *Extension of university expertise to the world outside the university, the community, in the service of improving the quality of life of the community and which is effected through a university model in which community service is integral to all aspects of the university: mission, structure and organization, hiring and promotion, curriculum and teaching, research and publications etc. (Lulat 2005:262).*

However, because there is a sense in which the practice of community service may become a one-directional activity, it became inevitable according to Preece (2011) to search for a better terminology that canvasses a partnership between the university and the community that is mutually beneficial. That terminology was "community engagement".

> *Community engagement is defined broadly, namely as the collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity. (Schuetze in Preece, 2011)*

Open and distance learning was initially known as distance learning which meant:

> "*an educational enterprise during which, a facilitator of learning who is usually separated from the learner by*

spatial or mental distance, gathers, collates and presents
information in a learnable form to one or a group of
learners who have accepted the responsibility to learn"
(Biao, 2012).

It became "open and distance learning" when holders of non-traditional tertiary education entry qualifications (the traditional ones being West African School Certificate, International General Certificate of Secondary Education, or their equivalent) began to be admitted for tertiary education with lower qualifications that led them to benefit from remedial education while on their learning programme.

In concrete terms, African universities are to view African communities as prototypes of universities within which all units of a conventional university exist (education, science, technology, business, etc.). Universities are to map out plans to enter the communities with the view to engaging communities for the purpose of not only diversifying but developing occupations already existing within the communities. For example, the Faculty of Engineering would choose to engage with blacksmiths, goldsmiths and other ironworkers with the view to upgrading their skills and adding value to the work they do. The Faculty of Agriculture would do same with farmers on regular basis.

In traditional African societies, every person has a job since each household is attributed a particular calling or vocation by society. All that is required of universities is to move into the communities with a plan to upgrade and make each of all these existing vocations relevant to current times through specific training schemes.

Steps such as the ones enunciated here have the capacity of diversifying occupational structures, promoting further vocational specialization, reducing joblessness, increasing literacy rates and ultimately laying the foundation for obtaining high returns from investment in higher education.

With regards to open and distance learning, African universities may wish to adopt two formats: one which combines extra-mural work with open and distance learning activities or the other which focuses on offering only open and distance learning.

Extra-mural work may focus on short courses in knowledge areas while the open and distance work may put on offering all the disciplines that are being taught in the traditional way within the university. A Centre for Lifelong Learning may be established that will comprise two sections, namely, a Department of Development work & Training and a Department of Open and Distance Learning.

While the Department of Development work & Training shall be coordinating the in-put of faculties and academic units as regard the university community engagement activities, the Department of Open and Distance Learning shall focus its activities on offering at a distance all that the academic units have to offer.

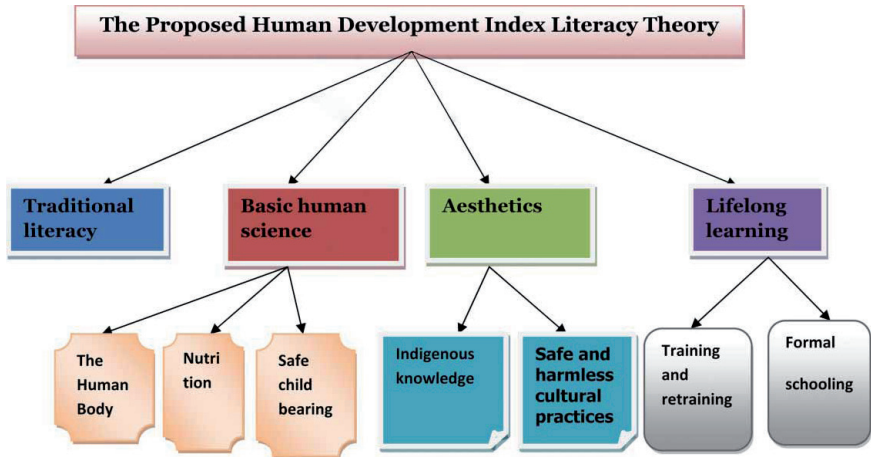**Literacy education and indigenous knowledge as leverage to African development**

The best known activity and practice to Adult Education is literacy education. Literacy education has been promoted since time

immemorial. Its practice has become quite refined within the last 7o years and with this process of refinement has come a number of issues.

For example, three schools have emerged that discuss socio-economic development in relation to literacy; one school submits that literacy does promote social and economic development; another school submits that it is not obvious that literacy promotes socio-economic development; yet another school submits that given certain conditions, literacy may promote socio-economic development while under other conditions, literacy will not lead to socio-economic development (Omolewa, 1998).

The existence of this myriad of schools is facilitated by the absence of a clear goal to which literacy education is directed. Where the promotion of literacy education were directed at a specific goal or guided by a clearly defined theory, literacy education would achieve the goal assigned to it.

The first and most basic goal that the promotion of literacy should seek to attain in the case of Africa, should be the raising of the human development index on the continent. This task is expeditiously and more easily implemented when already existing knowledges are relied upon to promote the specific pieces of knowledge whose learning is to be advanced. An example of how to prepare for a successful literacy education is given through guiding the literacy education with a theory such the Human Development Index Literacy theory whose diagram appears below.

The Proposed Human Development Index Literacy Theory

- Traditional literacy
- Basic human science
  - The Human Body
  - Nutrition
  - Safe child bearing
- Aesthetics
  - Indigenous knowledge
  - Safe and harmless cultural practices
- Lifelong learning
  - Training and retraining
  - Formal schooling

Source: Culled from Biao (2011) Human development index literacy theory as a new social development theory. *International Critical Thought 1,4:393.*

The Human Development Index Literacy advocates for literacy acquisition at four levels, namely, traditional literacy (ability to read, write and enumerate), basic human science (ability to understand how the human system works), aesthetics (ability to appreciate culture and IKS) for what they are worth, and lifelong learning (understanding that life learning throughout life is the safest way of living). It concludes that any persons or communities that may accept and implement these steps are most susceptible to promoting development at personal and community levels.

POLICY RECOMMENDATIONS

Higher education in Africa currently serves only a low percentage of the population. Yet, all that is taught within the university (education, technology, medicine, science, etc.) exists within the African

communities in their traditional or tradi-modern transitional forms. Through the following recommendations, higher education in Africa will be able to increase its relevance, cost effectiveness and visibility within the African space. Additionally and most importantly, African higher education through the employment of the instrument of Adult Education would have been able to serve the African audience much better.

- African governments should henceforth demand, that their higher education institutions become responsive to the developmental yearnings of African populations more than ever before. After governments may have supported these institutions with fairly adequate budget, the institutions should be requested to engage with communities in all domains within which learning is facilitated on campuses with the view to improving practice in all those areas in all those areas within African communities.

- As in all things, the beginning is usually the most difficult. In order to encourage institutions of higher learning to engage with communities, a portion of the budget of these institutions should be tied up to evidence of degrees of institutions' engagement with communities.

CONCLUSION

Adult Education was the first education that there was; it is the education that there is; it will be the last education that there will be when the time comes for the human being to depart this world. It has the ability of doing more than completing formal education in developing countries. It has the potentials of promoting large scale development and to grant education to large populations of both rural and urban persons at relatively low cost.

African higher education institutions stand a golden opportunity of redeeming their poor image of low performance, low level of relevance and invisibility through the employment of Adult Education as an instrument for extending their work and assistance to the development efforts of African communities.

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Professor Biao has led and participated in six funded national and international Lifelong Learning research projects. His publications include 13 books, 20 book chapters, 41 refereed journal articles, 44 monographs and 11 technical reports.

Following his analysis of major social development theories (including the Classical economic theory, the Non-classical economic theory, the Index of Sustainable Economic Welfare Theory and the Human Development Index Theory) that have been employed to guide and measure the development of the world since Adam Smith's *Wealth of Nations* (1776), Professor Biao developed a new social development theory known as the Human Development Index Literacy Theory in 2011. The theory which he recommends for advancing development within the developing world, de-emphasises the role of capital formation and elevates the efficacy of the functions of literacy education and indigenous knowledges in the process of implementing social development.

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