

Early childhood education: Penetrating the impenetrable issues

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ABSTRACT

Early childhood education has received attention from philosophers, educationists and psycho-analysts such as Plato, Avicenna, Locke, Pestalozzi, Whitehead, Carl Jung, Binet, Piaget, Montessori, Sigmund Freud, Howard Gardner, among others. In Africa, the backdrop of poverty, Internally Displaced Persons (IDPs) in strife-torn countries, among other threats, have deprived many children of quality education. Some have missed valuable education because of poor and bad government leadership. Lack of good governance has impacted negatively on education delivery. The emergence of ICT has worsened the quality of education as many children have lost touch with the 3 Rs of reading, arithmetic, and writing skills. Many interventions are needed to support single mothers, latchkey children of busy working parents, among others. The cost of education is too burdensome for some families. Our local governments are weak on the ground to offer support. Differential learning is not possible in schools with untrained teachers, paucity of learning and instructional materials etc. Social interventions are needed to support vulnerable children to be in school and not to become street kids and potential social outcasts and misfits. We need to revive strong religious and moral education in schools to arrest social and moral decay. There is need to create sense of wonder, creativity, imagination, discovery, and activity in children by touching their hands, hearts, and minds through drama, art and crafts, story-telling, physical exercise, STEM education, action-research, thematic studies, units of discovery, excursions, and other multi-learning channels. Precocious and gifted children need challenging programmes. Autism and physically-, socially- and emotionally-challenged children need additional school support in inclusive education where no child is left behind. Local curricula need to be integrated and attention paid to issues of multiculturalism.

Keywords: Inclusivity, diversity, creativity, 3Rs, interventions, innovation, micro-level, macro-level, physically-challenged, multiculturalism, moral education, latchkey children, differential learning, STEM education, enduring understanding and essential question, big picture, multidisciplinary approach, pre-school education, special education, capacity building.

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INTRODUCTION

The aim of this paper requires a generic approach as well as an eclectic and overarching approach. It touches on many delicate contemporary issues of early childhood education, particularly in Africa, and draws on examples from Ghana and Zambia. Having started teaching in Ghana in 1970 after having undergone a four year residential teacher training programme, the author shares insights from experience of teaching across the spectrum in government or public basic schools, private schools, an international elite school in Lusaka, and currently

lecturing in a tertiary institution with many professional, undergraduate and master's programmes.

The title of this paper could also have been reframed and recast as, *Early Childhood Education- Pondering over the imponderable and intractable issues with particular reference to African experiences*. The thesis of this paper is that there are weighty issues affecting early childhood education in Africa in particular and the world in general. In Africa, these issues are financial, administrative, governance-related, geographical, social,

economic, religious, capacity-building-related, knowledge, and skills based, among others. Some issues have been discussed and researched on but no clear and concrete actions have been taken to implement resolutions arrived at in various fora like this one. A lot of paperwork has been done but often there is lack of wherewithal or resources to implement recommendations. Also many personnel at the coalface of early childhood education in Africa lack the relevant knowledge of how best to deliver services. Many pre-schools lack specialists who can diagnose children with learning impairments or who can measure the Intelligence Quotients (IQs) of children to determine levels of mental retardation and the need for interventions against impairments such as autism, dyslexia, deafness, partial blindness, among others. There are also very few specialist schools for special education or for precocious or gifted children. Teacher education tends to be generic or general as there are few specialist teacher education institutions. There are no government policies to support differential learning in schools. Some governments in Africa face governance issues of lack of accountability and proper allocation of national resources due to weak oversight systems and weak checks and balances (<http://unpan1.un.org/intradoc/groups/public/documents/un/unpan020257.pdf>).

The winner-takes-all mentality of our governmental systems in Africa, particularly in Ghana and Zambia, is negatively impacting on educational service delivery. In Ghana for instance, there has been emphasis on quantity rather than on quality as many schools are built but service delivery is poor due to lack of trained teachers, lack of instructional materials, poor examination results, high incidence of functional illiteracy of pupils as recorded recently by an OECD report which surveyed 74 countries, and Ghana came last on the rankings (Myjoyonline.com). This is where emphasis should be laid on the core and basic areas of learning such as the 3Rs of reading, writing, and arithmetic, and also on STEM education which incorporates Science, Technology, Engineering, and Mathematics (careerplanning.about.com)

There is also need for the Development Approach Practice to contextualize our educational curricula to our local needs and cultures without copying wholesale and transplanting foreign educational systems which are unsustainable and contrary to our value systems, traditions, cultures and our developmental needs (r4d.dfid.gov.uk). There is need to adapt some of the foreign systems. Zambia for example runs a 7-5-4 system of education with seven years primary education, five years junior and senior secondary education culminating in Ordinary Level Certificate, and four years university education. The system does not incorporate Advanced Level education as this is optional and provided for by private schools. Entry level age to the school system is age 6 (MOE Educating our future, 1996). In contrast, from 1986, Ghana has been running a complex 2-6-3-3-4

educational system comprising two years of pre-school, six years of primary school, three years junior high secondary school, three years senior high secondary school, and four years of university education (Morrison, 2002). This is in contrast to the pre-1986 system of 6-4/5-2-3 system which comprised six years primary education, four years of middle school which overlapped a five year secondary school system (provided one passed the entry common entrance examination at any stage in the middle school), two years of sixth form or advanced level, and three years of university (Morrison, 2002). The new system of 2-6-3-3-4 seems very loaded in content and faces challenges of adequate capacity to deliver quality education.

The roadmap for this paper involves first having a broad general survey of the socio-politico-economic backcloth to put the topic into focus and context. Secondly, there is review of some early attempts and interventions at providing early childhood education in some African countries. Thirdly, an attempt is made to examine some pedagogical underpinnings, theories, and philosophies of education. Fourthly, some models are proffered for examination as food for thought. Finally, comes the wrapping-up of the conclusion. The paper is interspersed with personal anecdotes to share some of insights from teaching and plying this trade for 45 years.

Be that as it may, early childhood education can be defined as education from time zero at birth to eight years old or the period from birth through reception, nursery, and kindergarten up to Primary grade 2 (Educating our future, p. 7). It has been widely documented that the first five years of a child's life are the most crucial and cardinal period within which a solid foundation is built for take-off. If you lose this period, you lose the child forever. In this scenario, the mother of the child becomes the principal teacher of the child. This is why girl child education is cardinal to the progress of humanity. Aggrey (1922), who was one of the Phelps-Stokes Commission from the USA which toured Africa, said that "If you educate a man, you educate an individual but if you educate a woman, you educate a whole family". Others in the close family, consisting of siblings and father, do also chip in the informal education of the child. Also there is the wider extended family members of uncles, aunts, grandparents, cousins, and neighbours to complement the socialization process of the child. In most cases, the father is often absent from home as he goes out to work to earn some good money and remit it home to support the family. In the colonial period, many Zambian men emigrated to the Copperbelt to work in the mines, while in countries such as Mozambique, Malawi, and Lesotho, the men emigrated to the mines in South Africa as 'guest workers', anomie, and absent fathers. Thus, many mothers or wives were left alone to raise children single-handedly, assisted in some cases by the extended families and the support of the missionaries. In Zambia, principally, the Catholic White fathers and the

Presbyterians did a lot for education provision (Carmody, 1999). Fathers are hardly at home as work takes them away, sometimes, to far-off places to earn some decent incomes. Some may not come back as they get hooked to other foreign ladies who become their mistresses and paramours. Can you imagine a situation where a nursing mother who is a professional, has to go back for work after post-parturition in just three months, leaving the young helpless baby to the whims and caprices of strangers such as housemaids (where they can be afforded, hardly the case), or to untrained crèche attendants, or close family members or hired housemaids (remember the case of the Ugandan maid episode which was widely publicized on the internet?). The young fragile child begins life with trauma, lack of maternal bonding, among other issues. The Scandinavian countries have done well to legislate for longer maternity leave of up to one year, and even granting the luxury of paternity leave of up to three months (UNICEF Innocenti Report, 2008). Where in Africa or any developing country will you find this kind of generous and luxurious dispensation of welfare provision? Because of prevalence of negative and constraining factors such as poverty, poorly-remunerated jobs, and lack of state welfare systems in place in Africa, nursing mothers are forced to resume work early after just three months of giving birth, and they abandon the fates of their fragile babies to untrained care-givers and well-wishers. There is an anecdote in Nigeria where the author worked and lived for almost eleven years in the 80s and 90s. A young professional lady gave birth and recruited a housemaid who was raw, rustic, and illiterate from the remote village. She was given the care of the young baby after its mother resumed work. One day, the baby cried all day as it was very hot. The maid in her innocent crudity and uneducated reasoning thought of a way to keep the baby comfortable. She decided to cool off the baby by putting it in the refrigerator. When the mother returned, she asked the maid for the whereabouts of the baby, and she reported that since it was crying too much, she had kept it in the fridge to cool off!

EARLY LOCAL INTERVENTIONS AND SUPPORT

In Africa and other poor areas of the world, young children of school-going age have to walk several kilometres to school because of the dispersed nature of settlements. This is particularly so in Zambia where the author currently live and work (Educating our future, p. 151). There are few nursing homes and crèches where nursing mothers can leave their young babies and toddlers. In urban areas, private care-givers have set up nurseries and kindergartens but they lack proper infrastructure and well-trained care-givers. In poor communities, children are sometimes herded in filthy and insanitary surroundings. In some cases, government-

approving authorities obtain bribes and give approval to care-givers who do not qualify to run such outfits. Local governments, under whose ambit pre-school infrastructure and supervision fall, are grossly underfunded by central governments, and they operate in very poor areas where it is difficult to generate revenue (Educating our future, 1996: 127). Many African countries have made much noise from the rooftops about decentralisation of local governments but they have grown politically shy to implement their intentions (Educating our future, 1996). The lack of quality private pre-schools has been attributed to the over-centralisation of power in the one-party system in Zambia which came to an end in 1991.

Pre-school education and early childhood education have been neglected by African governments who for a long time have not put it in their schema of things, as they put the onus on parents and private providers. Early Childhood Care Development (ECCD) has been treated to Cinderella looks for a long time now in Africa, and it is just recently that African governments are enacting policies to prop it up (Morrison, 2002). It has now dawned on African governments to take responsibility of ECCD. The quality of pre-school education therefore varies widely in Africa due to many reasons and variables (Educating our future, 1996:138). In Ghana and Zambia, there has been a policy hiatus on early childhood education because of lack of capacity, neglect, lack of resources to invest in the sector, ignorance among policy makers on the cardinal importance of early childhood education, disparate and incoherent objectives, poor policy articulation, among a plethora of reasons. In the area of educational policies, one cannot lose sight of the UNESCO meeting in Addis Ababa in 1966 which was a watershed for reforming education in Africa. Then again we had the UNESCO Dakar conference of 2000. Growing up in Ghana in the 50s and 60s, pre-schools were a novelty and they were known as Day Nurseries. It was anathema among many Ghanaians in those days to send infants and toddlers to such places as it would be conceived in a negative light that you have not got much motherly care and love for a baby or toddler. Besides, many people could not afford the few pence towards the upkeep of their children in the day nurseries. A few children of the elite were taken to such schools and the upshot of it from my own experience of some of my classmates was that those who attended pre-school excelled at school and progressed rapidly in their educational career, some being made to skip a grade or two. In fact, pre-school or early childhood education for many decades has not been a part of the mainstream ministries of education in Africa, and therefore they were not budgeted for. In some cases in Africa, Early Childhood Education comes under three or more ministries such as Ministry of Social Welfare and Community Development, Ministry of Education, Ministry of Youth and Sports, Ministry of Gender, Ministry of

Table 1. Expenditures on Education in Ghana as Per cent of GDP.

Year	2000	2010	2009	2008	2007	2006	2005
%GDP Exp.	8.1	5.5	5.3	5.8	5.5	5.3	7.4

Science, Technology and Vocational Training, among others (Educating our Future 1996: 134). There is therefore a dilemma as to where responsibility lines are to be drawn. The churches and some public-spirited individuals took it upon themselves to render early childhood education facilities such as Sunday schools, Day Nurseries, and kindergartens. (Table 1)

In 1996, the Zambian Government launched the Integrated Education Sector Investment Programme (ESIP) with the mission of: "...investing in people as the most critical factor in development, with the objective of promoting quality, relevance and equitable provision in education and training through the rational, coordinated and efficient use of available resources" (Ministry of Education of Zambia, 1996).

Furthermore, the Zambian government embarked on decentralization of education to bring on board the participation of local governments, churches, communities, NGOs, individuals, among others (Ministry of Education of Zambia, 1996).

Objective 4 of the Zambian Government 1996 Policy Framework stated, "To promote greater equity in the provision of education and training, with emphasis on the poor, girls and women, those with special needs, and other vulnerable groups."

Hitherto, education of girls was considered unimportant as girls were seen to be prepared informally at home by their mothers for marriage (Carmody, 1999: 74). Also some children with learning disabilities were excluded or did not receive specialist care and assistance. The new policy sought to rectify those anomalies. The Zambian Policy Framework acknowledged that despite increase in the number of schools and colleges, the educational sector still faced challenges of quality, access, equity and flexibility as class sizes were very large, with many teachers, especially in rural areas being untrained, students and pupils had few contact hours with teachers as most schools ran three or four shifts. It noted that access to education had been hampered by constraints of resources, long distances to school, poverty of the people, and poor health status of the clientele due to the HIV/AIDS pandemic, among others (Ministry of Education 1996: 10-11). Enrolment in schools dropped from 96 to 89% because of limitation of accommodation and school classrooms. It also noted that high poverty levels from retrenchments and privatization in the 90s had affected employment levels, with many parents out of jobs, with the result that most parents resorted to child labour and early marriage for their girls in order to reduce their financial burdens. The Policy Framework also noted the inability of teacher training institutions to cope with

market demand for more teachers. It noted that the high prevalence of diseases such as malaria, TB, diarrhoea, and HIV/AIDS led to increase in orphans, poor participation rate of children in education, among other negative effects (Ministry of Education 1996: 10-11). According to Fink et al. (2012), Early Childhood Education remains underdeveloped in Zambia.

The National Policy on Education Paper of Zambia (1996) defines a pupil with special education needs or an exceptional child as one who:

- i) has a physical, hearing, speech or visual impairment
- ii) is significantly different from others mentally, whether by being very bright, being a slow learner, or being severely impaired mentally, or
- iii) is socially maladjusted or emotionally disturbed.

(Ministry of Education, Zambia, National Policy on Education, 1996)

The policy document goes on to define Early Childhood Education as one targeted at those between ages three and six, whose learning takes place both at home and at school principally through play-way method. It states that the pre-school should neither imitate the home nor the school but rather it should be a crossbreed between the two (MOE, Zambia 1996: 7-8). The document recognised that very few Zambian children benefitted from pre-school education because of paucity of facilities.

The following is the Zambian Government Policy towards Early Childhood Education:

1. The Ministry of Education acknowledges the important role of early childhood education in the multi-dimensional development of the young children.
2. Within the constraints of available resources the Ministry will encourage and facilitate the establishment of pre-school programmes that would reach out to all children, especially to those living in rural and poor urban areas.
3. The provision and funding of early childhood and pre-school education will be the responsibility of Councils, local communities, non-governmental organizations, private individuals and families. (MOE Zambia, 1996: 8)

On the Zambian Government strategy towards Early Childhood Education, it states:

1. The Ministry will provide professional services to pre-school education by:

- a) training teachers for pre-schools,

- b) developing curriculum materials for use in pre-schools, and
- c) monitoring standards at pre-schools.

2. The Ministry will collaborate with providers, partner ministries and others to develop policy guidelines for pre-school and early childhood education. (MOE, Zambia 1996:8)

POLITICAL STRIFE, SOCIAL NETWORK BREAKDOWN, GLOBAL SUPPLY-SIDE SHOCKS, IMPACT OF AUSTERITY MEASURES

During the 80s and 90s, many African countries faced a lot of economic challenges as their economies heated up under austere measures imposed by bilateral and multilateral institutions such as the IMF. Many African countries which needed bailout had to swallow the bitter pill of donors and the multilateral institutions in the form of Structural Adjustment Programmes (SAP), Enhanced Poverty Reduction Programmes (EPRP), Heavily-Indebted Poor Countries (HIPC) conditionalities and initiatives, Deindustrialisation, Privatisation, Decentralisation, and Public Sector Reform Programmes (PSRP). These were among a whole list of destabilizing initiatives. All these austere economic measures were against the backdrop of falling prices of export commodities, dwindling foreign reserves, depreciation of their currencies, runaway inflation, massive haemorrhage of trained personnel in the form of brain-drain, among others. The upshot of this bleak scenario in Africa was that poverty levels got so low that it affected the quality of educational service delivery. Many schools had lost teachers to the brain drain. Many breadwinners had lost their jobs due to massive retrenchments in the downsizing public sector, and the effect of massive privatization of state-owned enterprises. This sad scenario bred the phenomenon of street kids. Some of these kids had lost their parents at tender ages to the HIV-AIDS pandemic. Others had come from broken homes following the retrenchments and massive deindustrialization and privatization. Some had been sent into the streets to beg for their parents who were hiding in the background (MOE, Zambia, 1996)

In countries such as Liberia, Sierra Leone, Sudan, Burundi, Rwanda, Angola, Mozambique, among others, civil wars led to the sad phenomenon of child soldiers, internally displaced persons (IDPs) and the mushrooming of refugee camps. Many slums such as Kibera in Nairobi, Kenya received more economic and socially-displaced persons, amid crowdedness, crime, filth, and social moral decay, extreme pressure on utility services such as water, public places of convenience, electricity, and playgrounds for children. What kind of quality education do we expect for our children in such hostile and uncongenial and rundown surroundings?

Because of economic hardships and political instability,

many families were torn apart and many lost their long-established social norms such as communal care and sharing resources, respect for the rights of children, among others. In some slums, children were abused through paedophile, slave labour, among others. Many had lost their early childhood years without going to school or growing up in normal families. They grew up in ramshackle temporary shelters in refugee camps away from their homes, and sometimes in crime-infested neighbourhoods. At an early age, they become streetwise and they take to hard drugs, prostitution, theft, undertaking of piece-work to survive, among others. A few fortunate children find themselves in elite schools while the majority attends run-down public schools with dilapidated buildings. Some schools are held under trees or in classrooms whose roofs have been taken off by thunderstorms. This scenario still exists and smacks of educational apartheid. On the one-hand, there is factional elitism and on the other hand there is functional illiteracy. Those in the elite schools eventually go to university and become the ruling classes while those functional illiterates become the scum of the earth (cf *The Wretched of the Earth* by Frantz Fanon). This also raises serious questions about capitalism and the need to rope in the issue of skewed wealth distribution and the need for interventions to redistribute the national cake. Many of the affluent people end up stealing national resources through corruption, bribery and nepotism. They gain advantage economically through dubious networks, cronyism, and political hegemony, among others. Thus the lot of the children of the thieving classes is far better than the lot of the deprived children of the majority masses. This may eventually create room for social and political revolution and increase in armed robbery.

The writings of Paulo Freire (1921 to 1997) a Brazilian educator and philosopher, is germane to the above scenario as he once wrote, "Experience showed me once again the relationship between social class and knowledge". Freire's indigent background of hunger and poverty deprived him of quality education in his childhood as he averred that he was not dumb or dull at school but because of hunger and poverty, he could not pay attention to what was taught at school (newfoundations.com, 2015).

This is why the school feeding programme which was introduced under the regime of ex-President Kufuor in Ghana won him a global award because it was a powerful intervention and a magnet for drawing kids to school, especially the most disadvantaged ones. Freire produced his book, *Pedagogy of the Oppressed* in 1970, and it was seen in the same genre as Frantz Fanon's *The Wretched of the Earth* which was written in 1961. Freire once wrote,

"To try to know the reality that our students live is a task that the educational practice imposes on us; without this, we have no access to the way they think, so only with great difficulty can

we perceive what and how they know” (new foundations.com).

In this case, we can think of the child’s mind as a ‘*tabula rasa*’ or blank sheet alluded to by John Locke, on which to imprint what they should know. There is need to rethink this ‘*tabula rasa*’ issue because the child’s mind comes already programmed in the hereditary DNA of Crick and Watson, and it needs only nurturing and adaptation by the micro and macro-environments (www.newfoundations.com/GALLERY/Freire.htm; <https://en.wikipedia.org/wiki/Paulo-Freire>).

REVIEW OF EDUCATIONAL PHILOSOPHIES PERTAINING TO CHILDHOOD EDUCATION

Jean Piaget

Piaget, a French psychologist, was one of the early pioneers of child psychology as he plumbed the depths of how humans learn through what he termed cognitive development. Piaget believed one’s early childhood experiences played a vital role in determining what one would be in future (Wikipedia). Piaget dwelt much in his studies on how humans acquired knowledge through stages of construction, deconstruction, ascription, association, discrimination, grouping, abstraction, elimination, substitution, classification or categorisation or grouping into sets of identical objects (cf. Bertrand Russell’s set theory; Plato’s world of abstract concepts; Aristotle’s world of classification; Locke’s world of definitions and boundaries or clear limits), relativity, correlation, one-to-one correspondence or matching, among others. Piaget was for the idea of open education, child-centred learning, and open classrooms, among others (Wikipedia). Growing up in the 50s and 60s, I found at an early age that my father was a bricklayer and my mother was a petty trader. We were thirteen in the family and my parents worked extremely hard to sustain us. Apart from his job in the public sector, my father did serious farming and also did odd jobs as a tinker, native doctor, among others. My mother was a baker, retailer of cooked meals, among others. Being the only boy among many girls, I took so much to my father. I was influenced a lot by his political activism in those early days of pre-independence in Ghana. I found that my father displayed an almanac or calendar in our rooms showing the photos of the British colonial governors and those of the Ghanaian nationalists and political leaders. Though my father was half literate as he went as far as grade three, he was a connoisseur and repository of colonial history and he knew a smattering of French as he travelled to work in Ivory Coast long before I was born. He had two big magazines from National Geographic whose photos of the classical artists and also photos of industrial developments around the world, plus those of prominent world leaders helped me to photo-read and become

savvy in world events, geography, history, and geopolitics at a very tender age. My father played the guitar and accordion to the accompaniment of singing old hymns. My elder half-brother who is about 23 years ahead of me played the organ and musical saw at our church. My father was an admirer of nature and sometimes he would take me to a dam site to sit and watch the water and the surrounding lush forest. When we relocated to my hometown along the coast, he would take me to a beach resort reserved for only whites, and we would sit outside the enclosed area and watch them or take in the scene of ships sailing in the horizon or the coconut palm beach with its golden sands. All those treats made an indelible impact on my education as a child.

Alfred Binet (1857 to 1911) and Theodore Simon

Binet and Simon were French psychologists who invented the Intelligence Quotient (IQ) tests to measure the retardation or precocity of children in French schools. IQ was given as mental age over chronological age, expressed as a percentage. Normal children would score 100% on the aptitude tests while child prodigies would score more than 100%, and morons, imbeciles, and severely-retarded children would score below 100%. The aim of the test was to identify children who would need help with their school curriculum (Wikipedia). Their findings were published in 1903 in *L’Etude experimentale de l’intelligence* or learning disabilities and mentally-retarded children. The question to ask here is: how objective and universally applicable were the tests? How reliable, consistent, valid, and universal are these tests? How could they be administered in different cultural milieu? On the strength of Howard Gardner’s Multiple Intelligences, how do we declare a child mentally retarded when we have not taken pains to know their forte or natural strengths in other areas? The tests were narrow in their focus and they only tested academic or mental strength, and no other strengths such as motor ability, musical ability, spatial ability, relationship ability, among others.

Sigmund Freud

Freud introduced psychoanalysis as the science of understanding human behaviour as a means of understanding the root causes of neurosis and the personality of individuals (MacLeod, 2013). Freud identified three levels at which the human brain operated, namely the conscious state or the present focus or now, pre-conscious state (memory recall), and the unconscious state or the primordial programmed mind determined by DNA or heredity. Freud likened the human mind to an iceberg. He identified the psyche as composed of three parts, namely the id made up of instincts or animalistic/biological behaviour or sex drive

for pleasure, the ego made up of reality or the real you and made up of eating habits, sexuality and libido, survival, among others. The super-ego is made up of morality or angelic behaviour. Freud invented the Oedipus and Elantra myths to explain sexual behaviour at infancy as issues bordering on morality and upbringing. These concepts bring to the fore the trilogy of father, mother and God above as the three guarding and guiding the child to maturity. Of great importance in child psychology are the six defensive mechanisms which Freud identified namely, repression of aggressive thoughts connected to the Oedipus and Elantra complexes, denial, self-projection by externalising our conflicts onto objects such as a child role playing and flogging a doll or an imaginary person, displacement of tendencies by substitution with external objects in role play, regression into past behaviour such as finger sucking or bed wetting, sublimation of tendencies by canalising our excess energy from fisticuffs into useful pastimes such as sports, gardening, community service, among others (MacLeod, 2013). Freud was of the view that a person's past and childhood experiences determined their future behaviour. This assertion could be partially true, though many people are greatly influenced by their peer group, their geographical location, home circumstances, among many other variables.

Carl Jung

Jung also devoted his studies to personality theories. He posited that our personality is partially dependent on what he termed 'our collective unconsciousness', or traits from our ancestry and inherited customs. Jung used the term *persona* as the way we portray ourselves to others. *Animus* is the mirror image of our sex, whereby males exhibit female traits and vice-versa. He used the term *shadow or animal side* of man to mean both creative and destructive split personality. Finally, he viewed *self-actualisation* as the apex of man's development. He wrote treatises such as *Modern Man in Search of his soul* (1933), and *The phenomenology of the spirit in fairy tales, The Archetypes and collective unconscious, 9 Part 1*. Jung's writings were said to be similar in ideas to those of Eysenck, Cattell and Erikson.

Childhood educators should study the personalities of their kids and know the extroverts, introverts, and the hyperactive (MacLeod, S.A. Retrieved from www.simplypsychology.org/carl_jung.html).

Montessori

Montessori developed a teaching method that was aimed at the overall development of the child in a free and relaxed environment using her famous play-way method.

She did practical studies of children and noted that children between birth and age six years had absorbent minds. She noted that during that period, children are prone to external stimuli. She recommended that teachers should be facilitators and mind-minders who should ensure order and beauty in the life of the child. She also recommended providing children with many learning objects to stimulate thinking in them. What Montessori professed, many of us do also confess to be the right method because children need guided freedom to form their own conclusions through self-discovery and interactivity (www.montessoritraining.net).

Avicenna

He was a Persian (980 to 1037) philosopher and physician who wrote about ten intelligences from God. This draws a parallel with Howard Gardner's Multiple Intelligences. Avicenna anchored his thesis on the premise that all knowledge flows from God and that is as it should be. This is why early childhood education should be securely anchored in religious and moral education. These days, our legislators and some vocal groups think it unfashionable and conservative to teach young ones about God, with the creationists on the one hand, and the Darwinians on the other hand at loggerheads, and diametrically opposed to each other (www.britannica.com/biography/Avicenna).

Whitehead

Alfred North Whitehead was a renowned British mathematician, philosopher, and educationist who stated that 'education is the purgation of the crudities of the mind' or a process of enlightenment and civilisation. He did not agree with the compartmentalisation of knowledge into liberal education and technical education as he said knowledge is holistic. He wrote that 'there is only one subject-matter for education, and that is life in all its manifestations.' He was of the view that a pupil's mind was not a fixed junk-box into which teachers threw in all sorts of knowledge, but rather it was a growing organism. In this scenario, we should reflect deeply on what we should be teaching our kids for them to lead an upright and productive life.

Whitehead was described as the unmoved mover of knowledge (plato.stanford.edu/entries/whitehead/#WPE).

Edward Bono

Edward de Bono came up with Six Thinking hats of enquiry and lateral thinking. The six hats are coloured differently. The White hat represents hard facts which are objective. The Green hat represents creativity,

possibilities, alternatives, and a free and open mind to explore new dimensions. The Blue hat represents controls which we need for children for them to follow the biblical narrow path to salvation. The Red hat represents emotions and feelings which are found in expressive forms when children play, dramatise, sing, tell stories, recite poetry, paint and draw, and partake in sports. Yellow represents optimism which we should give the children from stable marriages, safe environments to grow up in, governments who create light at the end of the tunnel, among others. Black represents scepticism or playing the devil's advocate (http://www.debonogroup.com/six_thinking_hats.php).

Plato

Plato averred that we learn by building on recollection of what we know or innate ability. Rene Descartes also thought likewise. Not John Locke who thought otherwise. I think it is important in dealing with early childhood education to be in both minds of assuming children have DNA knowledge and also they need to deepen their experience from received knowledge. Therefore the approach should be free will versus some controlled and conditioned learning through repetition, rehearsal, reinforcement (cf. Pavlov's experiments; Hawthorne studies), among others (<http://plato.stanford.edu/entries/childhood/>).

John Locke

Locke came up with the idea of 'tabula rasa' or blank sheet of the mind at birth on which to imprint what children are taught and should know. Locke's idea is debatable because Crick and Watson proved that we are all born with pre-determined DNA. Perhaps, this arouses the idea of the dichotomy between Darwin's evolution concept on the one hand, and the biblical creationist concept on the other hand. There is a Ghanaian proverb that states that no one teaches a child who God is. This is true. But we still need to guide children from our experience, for them to make informed decisions (<http://www.thegreatdebate.org.uk/LockeEpistem.html>).

SOME MODELS FOR CONSIDERATION FOR EARLY CHILDHOOD EDUCATIONAL REFORM-POLYCENTRIC CHILDHOOD EDUCATION (PCE)

Figure 1 depicts an equilateral triangle within a circumscribed circle, and inside the triangle is an inscribed circle representing the child. This model shows us that the perfect state for the child is where the child is impacted equally by both parents with God above them. It is the ideal situation for the normal healthy development of the child but economic hardships, divorce, separation,

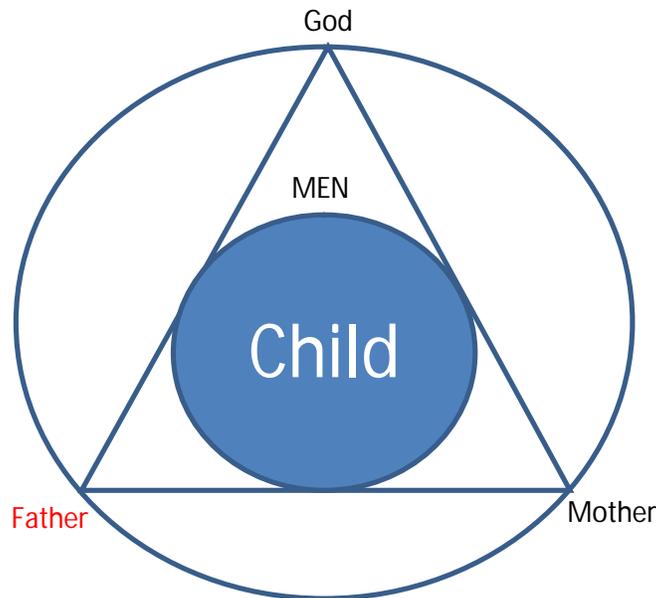


Figure 1. Father, Mother, Child, and God above. Note: Labels on these diagrams which are highlighted in red are key problem areas.

having children out of wedlock, chance births, among other abnormal situations, put the child at risk, often resulting in single-parent child upbringing and unbalanced growth for the child. Most often, men abandon the home and go to cohabit with other women, to the detriment of the child. Some women have chance meetings with men and have children by chance and not by choice through formalised marriages. Here, the women are to blame. But in neither case is the child to blame.

Figure 2 illustrates the relationship among the School, Community, and the Church. The child is in the middle and needs to be impacted in a balanced manner by all three entities. The school provides a micro-environment for character formation by making the children belong to houses, sections, and distinct competitive groups. The school has hierarchy to be followed, and it instills discipline and order in the child. The school gives formal education in the form of knowledge dissemination to help the child develop critical thinking faculties, and to understand the issues of the world, as well as learn basic principles governing all spheres of life. The school system has its weaknesses such as incompetent teachers, dictatorial school heads, bullies, sometimes harsh punishments which are not justified, among others. The Community has its role to partner with teachers in maintaining discipline at home and school through reinforcement and collaboration. The Community has the duty to work with the school authorities in achieving collective goals, working through associations such as the PTAs, Alumni Associations, and Local Governments and NGOs. The business community, entrepreneurs, and well-wishers must come together to help supply some of

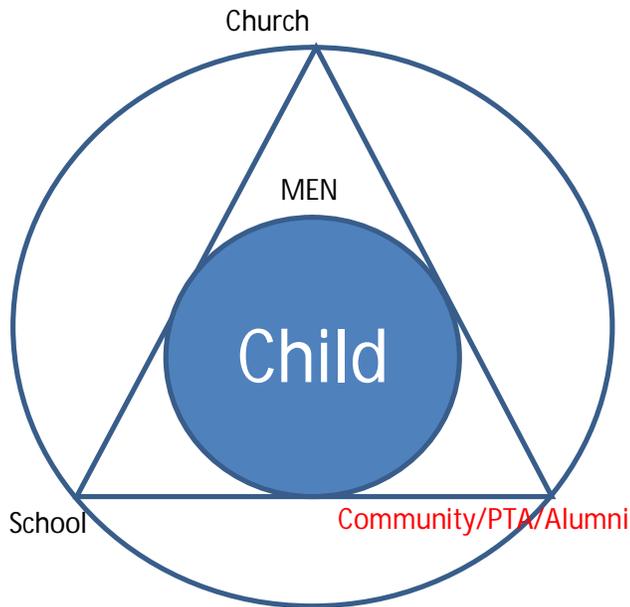


Figure 2. School, community and church.

the needs of the school through fund-raising activities such as food fairs, concerts, fete, carnivals, among others. In most African scenarios, communities do not support the schools. Rather, some resort to vandalising school property, threatening school staff, among others. The Church has the duty to minister to the spiritual needs of the child so that he grows to be God-fearing and a good citizen. Apart from looking after spiritual needs, many churches in Africa have provided school infrastructure and also trained teachers in their teacher training institutions. The Church thus has been playing multiple roles of providing succour socially, spiritually, physically, morally, and sometimes financially.

Some pastors have intervened by raising money to pay for the school fees of orphans and indigent but capable pupils. In some cases, they have adopted some of them and brought them up and educated them free of charge. The big role of the Church should be recognised in early childhood education. The weakness of the Church comes in where some pastors influence the appointment and transfer of teachers, which is sometimes seen as interference in school administration. Of course, he who calls the piper pays for the tune. They also breathe down over the necks of school heads, coercing them to adopt some catechisms or dogmatic teachings in the schools.

As shown in Figure 3, Local government system is government at the grassroots which allows people at the local level to participate in decisions affecting their welfare, following the principles of subsidiarity, delegation, decentralisation, and decongestion of power from the central government. In Africa, constitutional provisions deny autonomy to many local authorities to

raise enough revenue for their local needs. As a result, many local governments are weak, financially emasculated, and they are populated by staff, some of whom lack proper qualifications. In Ghana, the old local government structures were scrapped in the Local Government Reform of 1992, for them to be replaced by District and Metropolitan Assemblies which are heavily politicised and they lack proper functionality. Central government grants and Constituency Development Funds (CDF) emanating from central government are not properly accounted for as contracts for local works are not awarded in a transparent manner. The relevant checks and balances needed from the three arms of government are not forthcoming. The Judiciary has become very greedy and corrupt, the Legislature is a rubber stamp, and the Executive is made up of hand-picked ministers who dance to the tune of the President. Most Presidents in Africa have become Executive Monarchs, as they have become self-seeking and very parochial instead of the statesmanship and non-partisanship posture expected from them after winning elections. Poor and bad governance in Africa has greatly affected proper execution and implementation of government policies. Thus we see a spiral and domino-effect to many of our African problems. Thus poor policy making and execution have affected the quality of education service delivery in Africa.

Ghana and Zambia being unitary states, it is a foregone conclusion that the regional and provincial administrations or governments are mere replicas of the central governments, as they wield no autonomous powers. This is in contrast to large countries such as Canada, Australia, and USA where their federal and confederal constitutions allow the provinces and constituent states to have developmental powers to initiate their programmes. This brings competition, diversity and rapid development.

At the central government level of countries, the governments are responsible for policy making and providing support to the state or regional and provincial governments through grants (Figure 4). Where central government machinery is weak due to lapses in the constitution, many areas and sectors such as Early Childhood Education suffer. Africa's democratic credentials are suspect. Bureaucracy, lack of transparency, tribalism, nepotism and lack of capacity are the major challenges. In Africa, regional blocs such as ECOWAS, COMESA, and SADC have not yet fully integrated and they lack the clout and financial muscle of the EU to render aid to member countries. These regional economic blocs for integration have petty squabbles and jealousies among them as the powerful ones seek hegemony and control. The EU and other donors who give aid to African countries have often complained of donor aid being under-utilised or abused, leading to derogative terminologies such as Aid fatigue, Dependency syndrome, Fungibility of donor aid, among

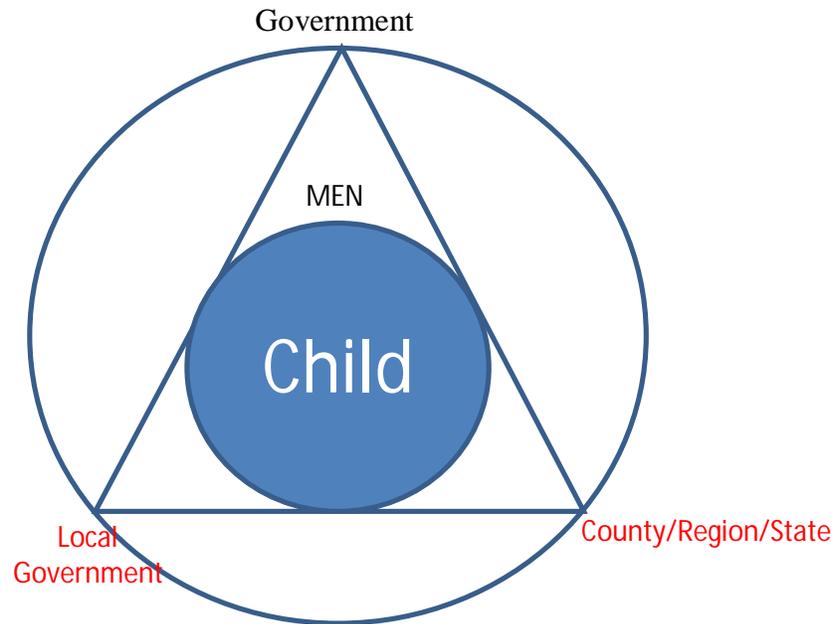


Figure 3. Local government, state/region/province, central or federal government.

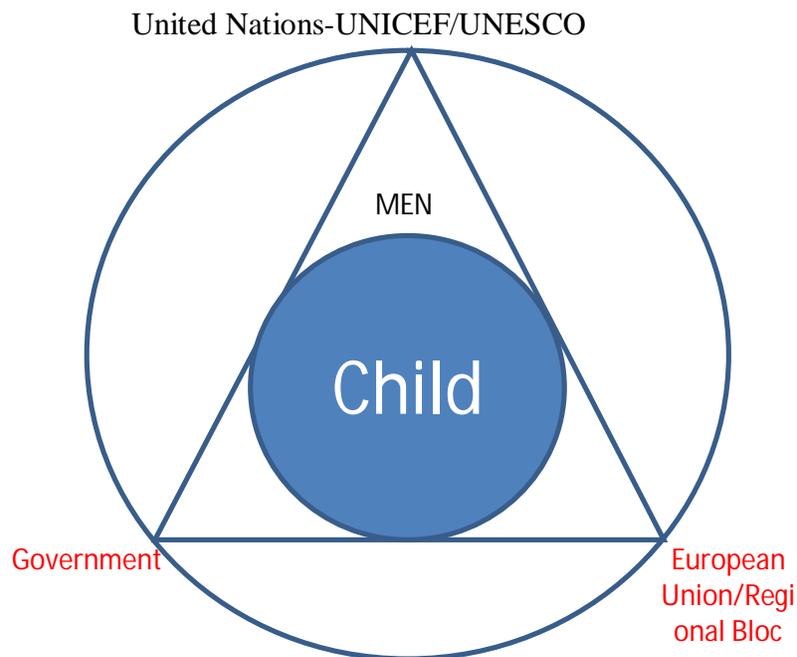


Figure 4. Central government, regional bloc and UN.

others. We should seek to build synergies and capacities for sustainable development of Early Childhood Education structures, relying on funding, technical advice, and collaboration with UN Agencies such as UNICEF, UNESCO, World Bank, among others. Home-grown policies and panacea to our educational woes should be sought and encouraged, rather than perpetually looking

up to donor aid. The 2007 to 2009 global financial crunch was an eye-opener that donors can be affected adversely by external supply shocks.

The above model can be termed a Polycentric Childhood Education model. It informs us that many factors, remote and immediate, influence Early Childhood Care, Development and Education (ECCDE).

SOME CONTEMPORARY ISSUES

Multiple intelligences

Howard Gardner came up with the idea of multiple intelligences to emphasise the need for having diverse learning styles. He observed that children in the classroom or in home-based learning environments manifest several innate and cognitive abilities such as spatial ability, motor ability, ability in music, ability in logic, ability in forming relationship, emotional ability, linguistic ability, among others. Thus it is incumbent on teachers and care-givers to discover the dominant ability of a child and use that as a lever to prise open up the child to the world of other knowledge. This approach of Gardner recognizes that one size does not fit all. It also accepts differentiation in learning styles of children and allows for inclusivity, diversity and closure.

Multiculturalism

Fancy a child growing up in a house where the father is French, the mother is English, and they live in Russia. Which language is this child going to pick up? Eventually, this child may end up a polyglot, and if he is a precocious child, he may end up a genius or polymath.

It is instructive to learn that survival requires the child to learn many languages, especially in this globalised world. Children have retentive and photogenic brains and they should be made to appreciate cultural diversity by learning as many languages as possible for global functionality. Educational authorities should allow immigrant children to pursue courses in their own native languages to show tolerance and inclusivity. This will lead to acceptance, less racial bigotry, and a better world of less racial tensions.

Gravity model parallel

The author hereby makes a suggestion of graphical models to encapsulate a simple gravity equation or function, relating success in Early Childhood Education (independent variable) to some dependent variables mentioned in the graphical models above. The simple gravity model is given as:

$$F = g M_1 M_2 / d^2$$

Where:

F is the force of attraction between two bodies, M_1 and M_2
 g is a gravitational constant
 d is the distance between the two bodies

Thus modelled on this, Success of Early Childhood Education:

$$S_{ECE} = g MLV / (PUTIN)^2$$

Where:

S_{ECE} represents success of early childhood education
 M represents success or otherwise of marriage
 L represents capacity of local governments
 V represents capacity of NGOs
 g represents combined input of national governments, regional blocs like the EU, and the input of UN and its agencies such as UNICEF, UNESCO, World Bank (WB)
 P represents characteristics of a particular population
 U represents levels of unemployment
 T represents technological advancement and sophistication
 I represents level of industrialisation
 N represents variables such as national insurance, national health care, national culture, and the new world trade order.

Of these variables, P, U, and N apply directly to the poor developing countries, while T and I apply to the advanced countries.

S_{ECE} for the developing countries is:

$$g MLV/PUN$$

S_{ECE} for advanced countries is:

$$g MLV/IT$$

g, and PUTIN can be viewed as macro-environmental factors while MLV are the micro-level factors.

Thus, g and PUTIN or INPUT, do cancel themselves out.

$$S_{ECE} = f(M, L, V).$$

S_{ECE} values can be computed separately for the advanced countries and for the developing countries where some weighting can be given to population factors such as density, size, PCI (per capita income), rate of growth, and mortality rate.

Technology can be measured by proxies such as whether a country manufactured cars or machines or aeroplanes or computers, and the percentage of exports which is made up of sophisticated machinery.

Industrialisation will be measured by the manufacturing component of GDP (Gross Domestic Product).

G will be the total contribution to Early Childhood Education from donors, regional blocs, central government, and political good governance index.

STEM education

STEM stands for Science, Technology, Engineering, and Mathematics. This concept has been around in Scotland and Ireland for some years as the basic subjects which

children need to learn to succeed in a globalized world. This does not preclude other areas of humanities, social sciences, music, fine art, among others. Early childhood education should expose children early to STEM education in order to build a solid foundation for their future success.

Inclusivity

The physically challenged children, emotionally traumatised children, economically disadvantaged children, naturally endowed child prodigies - all these should find adequate space in the curricula, for all of them to be integrated into the school system without letting them feel excluded. The economic divide between the rich and poor is causing many children to be excluded from early childhood education, and this issue of uneven distribution of wealth is universal, but more pronounced in the developing world where there are no state social support systems or interventions. In Zambia, the government has embarked on a pilot scheme of social cash transfer scheme to identified poor families. This scheme is on-going in Kenya, Mauritius, Namibia, among others. In Ghana, there was the school feeding programme and Kindle e-book distribution. Some NGOs are engaged in outback and outreach programmes to the rural areas by using light aircraft to distribute school kits as well as medical kits. Mobile clinics and mobile schools have been set up in some countries to sensitise school-going children to look for help. To break through and reach far-flung areas requires the collaboration of governments and NGOs in Public-Private-Partnership (PPP) arrangements. It also requires the training of more special education teachers and equipping schools with special teaching aids.

Creativity

Montessori's play-way method is premised on child-centred education or what is sometimes called child suggestibility. Children should be guided to learn naturally through discovery. Learning through play helps them mould their characters, develop leadership skills, role play, and accept to work in groups and teams of varied ability and interests. Play-way method helps them to share things and be less selfish and self-centred. It opens them up to healthy competition. They can discover their talents through art forms, sports, drama, music, simulated games, watching cartoons and video games. They can solve puzzles to sharpen their insight and critical thinking faculties.

Action-centred learning (ACL)

Pestalozzi alluded to training the head, hands and heart

of the child. Action-centred learning involves going on excursions and industrial tours, internships, and undertaking project coursework. It helps children to develop the spirit of solving problems and carrying out research to understand better some concepts. This approach requires parental support, support of siblings, teachers, and mentors. According to Pestalozzi, "children should learn through activity instead of words and they should draw their own conclusions" (infed.org, 2015).

Pestalozzi wanted to reconcile how education offered individual freedom on the one hand, and on the other hand, how education demanded for a responsible citizen who is imbued with a sense of national service (infed.org, 2015). He was said to be re-echoing the sentiments of the French philosopher, Jean Jacques Rousseau. Pestalozzi advocated for spontaneity and self-activity of children in a natural way by not giving them ready-made stock answers but rather they should, through discovery find out their own answers through sense perception and guided experiments (infed.org, 2015). This is the way to go but unfortunately in Ghana and Zambia, most teachers do not heed this advice because of their agenda of making their students achieve record pass rates. This over-processing and rigid formalisation of school outcomes is most uncalled for, artificial and counter-productive. This rigmarole is common in schools in the USA where we have standardized tests and assessment centres. Besides, the way examination questions are set and marked only require stock answers which does not recognize thinking outside the box (Sakyi, 2015).

Cultural milieu

Culture is said to be total human experience expressed in tangible and intangible forms such as language, beliefs, traditions, norms, value systems, artefacts, technology, art forms, stories, food, clothing, legend, social relationships, oral tradition, among others. Culture is dynamic and adapts by cultural diffusion, exchange, and the dynamics of commerce and industry. The cultural glue cements and identifies a group of people as having a common ancestry, common aspirations, and common practices. In a globalized world, cultural isolation is impossible because of the growth of multinationals and transnationals such as Coca Cola, MacDonald, Microsoft, and the multi-lateral international governmental institutions (IGIs) such as the UN and EU. The products of Lenovo, HP (Hewlett-Packard), Samsung, Apple, among others are everywhere. The economic and policy decisions made by the UN and EU do affect and touch the lives of every human on earth. However, we have the concept of globallocalisation, meaning we have a global slant yet we keep an eye on local needs. Early Childhood Care Development cannot be an exception to globallocalisation because one size does not fit all. The

Zambian child can easily relate to and bond with the exploits of Kalulu in local folklore just as the Ghanaian child can understand and identify the objects in Ananse tales, while the British child can easily relate to the tales of King Arthur's knights at the Round Table, Morgan Le Fay and Excalibur, the fables of Robin Hood, Brer Rabbit, J.J Rowlings Harry Porter's horrors, Enid Blyton's Secret Seven and Secret Five series, Lewis Carrol's Alice in Wonderland, Rip Van Winkle's exploits near the Hudson River and on the Catskill Mountains, Omar Khassum's Arabian Nights, Ali Baba and the Forty Thieves, The Magic Carpet, Abdul the Trickster, among others. Mark Twain's Huckleberry Finn, Tom Sawyerr, Dickson's Oliver Twist, David Copperfield, Christmas Carol, Jules Verne's Nautilus and Round the World in 80 days, Alexander Dumas' the Three Musketeers, Cervantes' Don Quixote, Tintin's Adventures, Tolstoy, Pushkin, Gorky, and Dovtoyesky' (The Brothers Karamasov) in Russia, Goethe's fables in Germany, Heineman's African Writers' Series in Africa, among others. We need to have local content in children's literature in the early years to remove cultural imperialism and euro-centric education which has exacerbated the brain-drain syndrome in Africa. On culture, we also have to tackle cultural barriers to early childhood education in Africa such as the neglect of girls in education, lack of adequate trained female care-givers, among other issues. We need to increase equity, access, and quality in Early Childhood education by overcoming cultural barriers to gender equity, locating schools not far away from where children live, and making sure government funding to education is commensurate with demand and need.

Special education

Special education for the physically impaired children in Africa is grossly underfunded and inadequately provided. Few such centres exist in the urban areas where demand exceeds supply. There are no gifted-children centres available. Most physically impaired children have no choice but to be put in the mainstream schools. There are also very few trained psychologists, diagnostic and assessment centres. Many teachers in day-care or pre-schools have not heard about differential learning methods or the idea of Multiple Intelligences (MI) of Howard Gardner (int.search.myway.com), or about the concept of enduring understanding, big picture, essential question, or the Middle Years Curriculum (MYC) and Primary Years Programme (PYP) being implemented in International Baccalaureate (IB) Schools worldwide in the international schools. Neither have they heard about trans-disciplinary interaction and overarching concept of achieving learning synergies across the gamut of the educational system from pre-school to the senior high school (greatlearning.com).

Religious dogma

It is inconceivable in countries such as Ghana and Zambia to discuss education without recognizing the tireless efforts and great input of the traditional churches such as the Catholics, Methodists, Anglicans, Baptists, Presbyterians, among others. These churches were the ones which started and established most schools and colleges during the colonial period. At one time in Zambia during the First Republic from 1964 to 1991, the one party state of Kenneth Kaunda proclaimed the socialist ideology of Humanism, which was human-centred development. The churches were side-lined and they lost control of running the schools. The massification, dilution, scatterisation, fragmentation, and ideologicalisation or politicization of the school system affected quality delivery of education. Corporal punishment or caning was banned from the schools. School curricula content was driven by humanism ideology (Zambia, 1980). The state forgot that political parties will come and go but the church abides forever, as the word of God abides forever. Elsewhere in West Africa, Nigeria to be specific, we have the Boko Haram terrorist group whose name means western education or the book is forbidden or anathema to Islam. This is religious intolerance and ultra-extremism which is uncalled for. It must however be remembered that education without the foundation of God is baseless. Oxford, Cambridge, Paris, Bologna, Timbuktu, Al Hambra, Al Azar, Harvard, Yale, and all great citadels of knowledge were invariably established by theologians, as we recalled in William Chaucer's Canterbury Tales of his travelling pilgrim clergy. We have had great scholarship from great theologians such as St Augustine of Hippo, St Aquinas, Thomas a Beckett, Thomas a Kempis, Hugh Latimer, John Harvard, John Wesley, Thomas Moore, Martin Luther, St Paul, St Patrick, St Andrew, Spinoza, Cardinal Richlieu, among others. We all have different faiths with different paths, but in the end, we all aspire towards one ultimate truth of the Godhead.

It is therefore of utmost importance that early childhood education should be greatly touched by correct religious education, and not religious fanaticism because those are the delicate formative years. The children need guidance in their faith because education must touch the head, heart, hands, and soul of the child for him to receive a holistic education. The child needs a liberal education within liberal helpings of religion, patriotism, and moral teachings to grow up into a reasonable, humane and responsible global citizen.

CONCLUSIONS

In this paper, much has had to be said for treating our children like the little angels that they are by giving them an enabling environment in which to be nurtured and blossomed into worthwhile global citizens who will make

the world a better place than we found it. There is need to invest in them because they are our future. It is said that the way to the stars is steep, but then if we want to make our children stars, we need to make the steep ascent by sacrificing for them in terms of care, attention, fitting education, guidance, and above all, instilling in them the fear of God which is the beginning of wisdom. There is need to fathom how children think and behave by conducting more research, especially with regard to the physically, mentally, and socially challenged ones who we need to accommodate in a spirit of inclusivity. There is need to embrace them all in our semantic jungle, when dealing with multicultural classrooms, it is required to let children take control sometimes to determine what they want to know, discover, create, and bond with. It is important to impress upon our policy makers and legislators the need to provide a good platform for our children to be protected from neglect, abuse, exploitation, and the ravages of the economy. Hungry and malnourished children pose a danger to the future well-being of the world. This is why the school-feeding programme for which the former President of Ghana won an award should be commended and reinforced throughout the world. Uncared-for children may lead to the creation of a wasted and lost generation because of creating functional illiteracy among them due to their inability to master the rudiments of the 3Rs, nor being able to manifest their latent capabilities because we are not aware of concepts like Howard Gardner's multiple intelligences, Edward de Bono's lateral thinking or Six Thinking Hats, IB's MYC programme of units of enquiry, concepts of enduring understanding, and helping them to ask the essential question. There is need to have cross-cutting curricula which overarch from kindergarten to the university as a form of ensuring interactivity among the disciplines, and providing holistic education. Sometimes there is need to let our hair down and ignore rigmarole and standardised curricula by even embracing concepts like organised chaos, among others. It can be inferred from this paper that the critical factors which determine the success of early childhood education are the status of marriage or parental stability, contribution and support from local governments, and the input of voluntary organisations or NGOs. These micro-environmental factors are the pillars of the success of early childhood education.

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