

**Needs of the adult learner in university extension education to enhance sustainable development in Zambia in twenty-first century**

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**Abstract**

*The University of Zambia has been offering extension studies programmes to various people in communities from its inception in 1966 as the first public university in Zambia. Through extension studies programmes, the university takes university education closer to people's door step to enhance sustainable development. The university is involved in teaching or training of human resource, conducting research to solve problems in society, and offering various community services. University extension education is an important process of education whose constant aim is to develop the knowledge, attitudes, the will power and skill of people to solve their own problems, by their own efforts, instead of waiting for government to do it for them. University extension education enhances human resource development, cardinal in sustainable development and transforming society world over. However, many people and providers of university extension education like the University of Zambia do not precisely know the needs of university extension studies adult learners and potential clients in Zambia in the twenty-first century. This study revealed that providers of university extension education rarely conducted needs assessment for their students and potential clients. It is recommended that institutions providing university extension education should constantly assess the needs of the participants and potential adult learners to be in tandem with the ever changing world.*

**Introduction**

This study was conducted between 2012 and 2015 to assess the needs of the adult learner in university extension education in Zambia at the beginning of the twenty-first century. The ultimate challenge for all of us in the twenty-first century - in our personal lives or in our careers - is probably to attain our full potential. Doing this, however, requires skills, attitudes and abilities that most of us are not born with. The good news is that they can be learned through education like adult education. Maslow (1943) believes that learning is not an end in itself. Learning is the means to progress towards self-development, which he called self-actualization. The goals of adult education are individual development and, through this, improvement of society (Freire, 1993). Thus, we can safely state that the whole point of adult education is to help people, particularly adults to contribute to, promote, and participate in national development.

Although there is no agreed upon definition of development, this paper has adopted one used by the United Nations Development Programme which states that development is “to lead long and healthy lives, to be knowledgeable, to have access to the resources needed for a decent standard of living and to be able to actively participate in the life of the community” (<http://www.undp.org>). Achieving human development is linked to freeing people from obstacles that affect their ability to develop their own lives and communities. Development, therefore, is empowerment: it is about local people taking control of their own lives, expressing their own demands and finding their own solutions to their problems. Education is cardinal to achieve development in any society. Education is derived from a Greek word, which means to develop from "within". Education has brought about phenomenal changes in every aspect of people's life world over. It is a process which enables every individual to effectively participate in the activities of community and society and to make positive contribution to the progress of society (Carmody, 2004).

Research has shown that education is an equalizer among people of different background and cardinal to achieve sustainable development world over (Vella, 2004). Development is one of the main goals that all communities try to achieve in order to improve the living standards for individuals in communities and society. One way through which people can obtain education is university extension studies programmes, often incorporated in adult education. “...Extension studies activities are acceptable as a proper function of universities all over the world” (UNZA, 2012:5). University extension aims at training people in their locality. It offers vocational skills which are conceived as being directly related to the local environment within which it is being offered (Alexander, 1975). Indeed university extension education is a process of education whose constant aim is to develop the knowledge, the will power and skill of people to solve their own problems, by their own efforts, instead of waiting for government to do it for them.

At the University of Zambia, university extension activities include training human resource in various skills, organizing public lectures, conducting seminars, theatre for development and conferences (Chakanika, 1989) to diffuse University knowledge and university ways of thought throughout the nation. University extension enhances human resource development, cardinal in sustainable development and transforming society world over.

Although there is no universal definition of university extension education, this paper has adopted a more fitting definition put forward by Savile (1965 cited in Chakanika, 1989), which states that extension education is “...a process of education, its constant aim being to develop the knowledge, the will power and the skill of the people to

*solve their own problems, by their own efforts, instead of waiting for government to do it for them”* (Chakanika, 1989:47).

It is, however, argued that the education and training programmes offered by education institutions in Zambia are not relevant as they continue to create unemployment, instead of employment among the youths and adults. In other words, they are not responsive to the needs of society. Most of the learners registered under the university extension studies programmes are youths. Zambian youths like many other in the third world continue to face a lot of challenges such as high unemployment rates and poor quality education which does not respond to the learners’ needs. Zambia is facing the challenge of a growing youthful population which has to be harnessed in order for them to fully contribute to the social-economic development of society. Youths must be harnessed so that they fully contribute to the social-economic development of Zambia.

### **Statement of the problem**

At the time of conducting this study in the year 2015, unemployment levels among the youths and adults in Zambia were a source of great concern. According to the 2010 national population statistics, the Central Statistical Office reported that unemployment is a more serious problem in the young age groups of 12-14 (19.9 per cent); 15-19 (22.6 per cent); 20-24 (20.8 per cent) and the 25-29 (13.9 per cent) ([www.zamstats.gov.zm](http://www.zamstats.gov.zm)). The peak is in the age-groups 15-24. Given that young people of under 25 years in Zambia comprise about 63 per cent (roughly six million) of the total population, youth unemployment must be a special concern for Zambian policy makers. In fact, every year, over 240,000 school leavers are entering the labour market without hope of finding a job (MoE, 2009). The Labour and Social Security Minister Mr Fackson Shamenda echoed equally worrisome sentiments, “The majority of the Zambian youths have in the last 20 years remained unemployed, ill-educated and without any formal skills to enable them earn a living in society and contribute to sustainable national development” (Zambia Daily Mail, 2015:2).

Incidentally, adult and youth unemployment in Zambia highly correlates with poverty since the country has no social (unemployment) benefit system that would otherwise cushion the adults and youth from deprivation due to unemployment. Indeed, crime and other forms of juvenile delinquency can be traced to unemployment-related deprivations.

Adult and youth unemployment should, therefore, be a matter of special concern to the government and all stakeholders like education institutions which provide professional and skill training. Employment opportunities in Zambia are critical to the attainment of the country’s development objectives and for this to happen, there is need for sustained and strategic investment in adult and young people. However, many people and providers of university extension education do not precisely know the needs of university extension studies adult learners and potential clients in Zambia in the 21<sup>st</sup> Century. Little or lack of knowledge about the needs of university extension studies adult learners and potential clients in Zambia is a problem, which this study tried to address.

This study sought to assess the needs of university extension studies adult learners and potential clients in Zambia in the twenty-first century.

### **Objectives of the study**

The above purpose was addressed through the following specific objectives: i) to find out the most popular programmes offered by the University of Zambia through extension studies in Zambia in the twenty-first century; ii) to assess the most preferred programmes by potential university extension studies clients in Zambia in the twenty-first century; and iii) to establish what could be done to enhance facilitation of university extension studies programmes to meet the needs of the adult learners in Zambia in the twenty-first century.

### **Significance of the study**

Through this study, the University of Zambia extension studies section may become aware of evidence about the needs of university extension studies adult learners and potential clients in Zambia in the twenty-first century. The findings of the study may also show the University of Zambia and other providers of higher education and training the significance of realigning training programmes offered in line with the needs of adult learners and potential clients in society to enhance sustainable development.

The data collected may also benefit the facilitators of university extension programmes by providing them with useful literature that may enable them fully understand and participate in devising solution strategies to meet the needs and challenges of adult learners. The findings may also contribute information to the existing body of knowledge on meeting the needs of the adult learner in university extension studies.

### **Review of literature**

Literature search was employed in this study because it offers the greatest opportunity to benefit from the experience of others who have conducted related studies. Documents consulted include books and journals, annual reports for various organizations, government policy documents, international and local publications, as well as the Internet. The literature reviewed relate to three major issues in line with the study objectives: i) significance of university extension studies in human resource development; ii) assessing needs of adult learners and potential university extension studies clients; and iii) enhancing facilitation of university extension studies among adult learners.

### **Significance of University Extension Studies in human resource development**

While it is appreciated that university education is instrumental to high level skills development, at the same time triggering economic development, university extension education is more specific as it aims at training people in their locality. It offers vocational skills which are conceived as being directly related to the local environment within which it is being offered (Alexander, 1975). According to Kelly (1970), the first university to incorporate outreach programmes in its statutes was Glasgow in Scotland, where, from 1727, a Professor of Natural Philosophy undertook to give lectures in experimental philosophy to the general public while continuing to conduct his normal academic work.

In England, the idea was conceived in 1850 where an individual by the name of Sewell, tried to convince the University of Oxford that although it seemingly was impossible to bring the masses who were in need of education to the University, it could be possible to take the university to them (Peers, 1972). However, his vision was not implemented.

On the whole, it is generally agreed that university extension education began with the works of James Stuart of Trinity College of Cambridge University. He operationalized the concept of “peripatetic university,” to provide lectures to the working class (Jepson, 1973). James Stuart responded to an invitation to give lectures to groups of women in Leeds, Manchester, Sheffield and Liverpool. Not only did James Stuart deliver lectures to groups of women, he also lectured to groups of working men at Mechanic Institute in Crew.

By 1873, the University of Cambridge received petitions from towns where Stuart had lectured, on the possibility of establishing and formalizing this outreach programme of teaching these specialized topics to the community (Peers, 1972). It is further stated that the reason why the community petitioned the university was the fact that, the great bulk of the members of the community, let alone the youth, did not have the opportunity to go and study at the university. Thus, the university was asked to send teachers whom they trained and equipped for the service of the nation. In this way, it was perceived that the university would then hold a position and exert influence on every part of the nation and the great mass of people. The university extension education movement in England can essentially be said that, it emanated as a result of women movement for emancipation as well as a response to the needs and demands of the working class.

The American model of university extension education, generally takes the position that a university has an expanded role in education. It lays emphasis on mass education, and on providing a great variety of programs to meet all new needs of society. It regards a university as a sort of intellectual departmental store, offering courses in a variety of subjects. It is seen to provide remedial, vocational, liberal and political education for all adults. It does so with the belief that extension education should help people fit in and prepare themselves for the task of adjusting to an ever changing society (Ashby, 1966).

University extension education is viewed as an avenue through which citizens of a nation who missed the opportunity to enter full time study at the university, benefit from having a university in a country. Additionally, it is perceived as an avenue through which the university empowers the local people in their own environment with skills necessary for them to function effectively and efficiently. On these premises, the university extension education was firmly founded.

As a former colony of England, Zambia borrowed most ideas of university extension education from England. University extension education has the capacity to empower the weak and the poverty stricken members of the community with skills, knowledge and positive attitudes to function effectively and efficiently in their own environment.

### **Understanding University Extension studies adult learners’ needs**

As in most areas of education, for many years there has been intense debate about the definition, purpose, validity, and methods of learning needs assessment (Stufflebeam, *et al.*, 1985). In simple terms, a “need” can be said to refer to a lacuna or gap between “what is” and “what ought to be.” It is the discrepancy between a present state (what is)

and a desired state (what ought to be). The need is neither the present nor the future state; it is the gap between them (Altschuld and Kumar, 2010). Adult learners possess different needs, interests, and experiences (Brookfield, 1986). Understanding learners' needs is essential for providing quality education in university extension studies. The needs assessment process can be used as the basis for developing curricula and classroom practice that are responsive to learners' needs. It encompasses both what learners know and can do and what they want to learn and be able to do. Learners also need opportunities to evaluate what they have learned - to track their progress towards meeting goals they have set for themselves. Learners' needs assessment is a continuous process and takes place throughout the instructional programme.

The process can influence student placement, materials selection, curriculum design, and instructional practice (TESOL, 2003). At the beginning of a university extension studies programme, needs assessment might be used to determine course content, while during the programme, it assures that learners' goals and programme goals are being met and allows for necessary programme changes. At the end of the programme, needs assessment can be used for planning future directions for the learners and the programme (Marshall, 2002). These same tools also may be used as a way to measure progress at the end of an academic year. Learner self-assessment tools may have a variety of formats, including survey questionnaires that require learners to check areas of interest or need, open-ended interviews, or informal performance observations. For assessment to be effective, tools and activities must be appropriate for the particular learner or group of learners.

As aforementioned, one approach for accomplishing adult learners' needs in university extension studies is through the use of student evaluations. A common argument against the use of learner evaluations is that learners do not know their own needs. However, many studies have shown learner feedback or suggestions to be reliable and valid (Teaching Concerns, 1993). If we do not even attempt to understand and address their needs, we may fail to recognize the support our adult learners in university extension studies programmes require to be successful.

#### **Enhancing facilitation of University Extension studies among adult learners**

To remain relevant, the university offering university extension studies should strive to look back and examine the reason why university extension was established in order to know the direction to take in this century and formulate policies that would answer to the challenges encountered.

Even though the University of Zambia imported its extension education from the British, there is need to hybrid it with other versions of university extension education and contextualize it in the Zambian ambience if it has to remain relevant to the educational needs of the Zambian society. Chakanika (1989) postulates that university extension education in Zambia is administered in many ways, but prominent amongst them are; evening classes, workshops, seminars, public lectures and theatre for development.

The concept "extension" has evolved and eventually given birth to a whole new concept as an ideology. It now embraces a far much broader perspective to include all the activities of individuals and organizations who are engaged in the provision of knowledge and skills to both individuals and corporate organizations including communities, from the centre to the periphery.

From this perspective, one can readily infer that the concept of extension education has to do with the provision of a service conceived at the centre to the areas in the periphery so that, the service can have some bearing in those areas. However, Chakanika (1989:48) argues that the centre is not a point where concepts are developed by experts in isolation and diffused to the periphery, rather, "*extension education is said to involve a two way channel of knowledge and experience in which, field problems find their way into the laboratories and results are in turn taken back to the farmers and villagers in communities.*"

If we transpose the definition adopted in this work by Savile (1965) it becomes evident that Extension Education is founded on certain principles without which, it is considered defunct. Chakanika (1989:50) outlines the basic principles that underlie the operations and execution of extension education.

1. Extension education should be based on felt needs of the people in communities and society.
2. It should be according to the local conditions Extension work starts with the people as they are and work in harmony with their nature.
3. There is democratic procedure in the formation and execution of the university extension programmes.
4. The extension education programmes should benefit the people.
5. It should be made in consultation with the community.

It can be stated that literature cited in this work suggests that elsewhere university extension education has effectively empowered individuals and communities to attain development. However, so far, no study has been conducted to contribute to literature on assessing the needs of adult learners in university extension education in Zambia in the twenty-first century. Hence, this study was an attempt to fill this gap.

The section presents the findings of the study and discussions in relation to the set objectives.

**Needs assessment for University Extension students by service providers**

When asked how often the providers of university extension education conducted needs assessment among clients, most students indicated that the process was never conducted. It was revealed that from the 120 completed questionnaires administered to students at Mongu and Kaoma centres of western Zambia, only 4.2 per cent expressed that the University of Zambia conducted needs assessment among its university extension education clients. Table 1 summarizes the responses obtained from the questionnaires.

*Table 2: Frequency of conducting training needs assessment by the University of Zambia extension studies*

	Frequency	%
At the beginning of academic year	0	0
At the end of academic year	5	4.2
Every term	0	0
Not at all	115	95.8
Total	120	100.0

*Source: Field data.*

Since the study reveals that the University of Zambia rarely conducted needs assessment among its university extension studies students, it is difficult to tell what the clients really need. It appears the University authority at the main campus in Lusaka simply assumes what they think could be the training needs of people in society. This may be a contributing factor to the low levels of enrolment in the university extension studies programmes at many centres. The University needs to frequently conduct training needs assessments among its clients.

**Most popular University Extension courses offered by the University of Zambia in the twenty-first century**

At the first diploma programmes graduation ceremony for the School of Education, Adult Education and Extension Studies held at the Great East Road (main) Campus of the University of Zambia on 12<sup>th</sup> June, 2012, a total of 1,888 people graduated in various diplomas (UNZA, 2012: 12-13). The graduates at the first diploma programmes graduation ceremony were in the following fields of specialization through which they may contribute to sustainable national development:

1. Business Administration 571
2. Human Resource Management 358
3. Social Work 158
4. Project Planning and Management 155
5. Law 133
6. Public Administration 97
7. Sales and Marketing Management 75
8. Finance and Accounting 70
9. Purchasing & Supply Management 69
10. Economics 57
11. Public Relations 43
12. Records Management 33
13. Guidance and Counselling 31
14. Infection Prevention & Control 23
15. Journalism 15

Interestingly, business administration had the largest number of graduates (571, which is 30.2 per cent) followed by human resource management (358, which is 18.9 per cent), social work (158, which is 8.3 per cent) and project planning and management (155, which is 8.2 per cent). The lowest number was in journalism (15, which is 0.8 per cent). A similar trend was observed at the second graduation ceremony held at the Mulungushi International Conference Centre, Lusaka on 20<sup>th</sup> December 2013 where 2,226 people graduated.

At the 44<sup>th</sup> graduation ceremony of the University of Zambia held from 26<sup>th</sup> to 28<sup>th</sup> November 2014 at the university's main campus, 739 people graduated with diplomas studied under the university extension studies programmes (UNZA, 2014). The following was the break-down of the graduates according to programmes:

1. Business administration 170
2. Project Planning & Management 77
3. Social Work 74
4. Law 73
5. Human Resource Management 61
6. Finance and Accounting 53
7. Purchasing Supply & Management 45
8. Public Administration 44
9. Economics 31
10. Sales and Marketing Management 27
11. Infection Prevention & Control 26
12. Adult Education 22
13. Journalism 20
14. Public Relations 08
15. Records Management 05
16. Guidance and Counselling 02
17. Sports Studies 01

Business administration had the highest number of graduates, 107 representing 23.0 per cent. This was followed by project planning and management, 77 representing 10.4 per cent; and social work had 74 graduates, representing 10.0 per cent.

In 2015, 748 people graduated with diplomas and 119 with certificates at a graduation ceremony held at the University of Zambia's main campus on 11<sup>th</sup> December. This gave a total of 867 graduates in university extension studies courses. Among the diploma graduates, diploma in business administration had the largest number of 115. This was closely followed by early childhood education which had 113 graduates. Others were: public administration, 69; purchasing and supply management, 60; human resource management, 58; finance and accounting, 56; social work, 45; law, 44; project planning management, 42; adult education, 40; journalism, 22; economics, 18; infection prevention and control, 14; library information science, 13; sales and marketing, 11; guidance and counselling, 08; law enforcement, 07; public relations, 07; and records management, 06 (UNZA, 2015). From the figures of the 2015 graduates, diploma in business administration still topped the list representing 15.4 per cent while the newly introduced programme of diploma in early childhood education which was following closely had 15.1 per cent of the graduates. This shows that diploma in business management has been the most popular programme since 2012 when the university held its first graduation ceremony for university extension studies diploma programmes.

A few graduates interviewed by the author at the 2012 graduation ceremony indicated that they had been employed, promoted, started own businesses or advanced in studies because of the diploma programmes they completed with the University of Zambia's extension studies. Similarly, few business administration graduates interviewed at the 2015 graduation ceremony indicated that they pursued the business administration programme so that they may successfully start and manage their own businesses, whether they were in employment or self-employed. These graduates stated that the business administration diploma programme had equipped them with entrepreneurship skills, business skills and helped them nurture their business ideas into viable enterprises. Those who graduated with diploma in early childhood education stated that they pursued the new programme because of the possible job opportunity in the newly introduced early childhood education sector in schools by the Ministry of Education. They also hoped to start their own schools offering early childhood education. "Starting an early childhood education business does not require a lot of capital. One can start with just one room, even at a house and gradually expand", expressed one excited graduate.

When these graduates start and successfully run their own businesses, they can become self-reliant and may create employment to absorb some of the many unemployed youths in the country – thereby, enhancing national development. A few of these graduates were self-employed, managing their own businesses and wanted to improve on their entrepreneurship skills and knowledge. Education for entrepreneurship is a central issue in this era of globalization (Burns, 1989). Promotion of entrepreneurship may help curb the challenge of unemployment in Zambia.

Unemployment in the Zambian labour is on the upswing. Only few school leavers, university and college graduates find employment in the formal sector (MoE, 2009). Zambia like many other countries in Africa is characterized by a poorly performing economy. One cardinal issue is that many graduates cannot be absorbed by the job market. This is probably because the knowledge and skills provided by the educational system in Zambia are no longer appropriate for today's economic realities (Carmody, 2004).

The distribution of number of graduates in various diploma programmes above also shows us what education clients need to respond to the needs of society. Education and training systems have to change in order to create a culture of business and entrepreneurship as well as equip learners with knowledge, skills and positives attitudes that would enable them venture into their own business as an alternative to formal employment. All University of Zambia adult education and extension studies programmes could as well include a course in entrepreneurship or a component of it to be responsive to the needs of the adult learners in Zambia in the 21<sup>st</sup> Century, as shown by the distribution of number of graduates at the 1<sup>st</sup> graduation ceremony of extension studies diploma programmes. This may greatly enhance national sustainable development.

**Preferred programmes by potential University Extension Studies clients in Zambia in the twenty-first century**

When asked about preferred study programme, potential clients who participated in the interviews in Western Province indicated that they needed courses in general agriculture, primary school teaching and hotel and hospitality. The data was collected in eight of the 16 districts in the province. The interviews were conducted in Mongu, Limulunga, Nalolo, Senanga, Kaoma, Nkeyema, Sioma and Sesheke districts by the author during university extension education sensitization tours to market extension studies. These findings could be similar to what could be obtained in other rural provinces.

The University of Zambia did not offer any of these programmes at the time of this study between 2012 and 2015. The only programme related to the preferred programmes in the province was early childhood education introduced in 2013. The early childhood education programme has already recorded good response from the public as could be evidenced from the high number of first diploma graduates at the 2015 graduation ceremony (UNZA, 2015). The programme had the second highest number of graduates after business administration. This programme is related to the primary school teaching diploma programme which many people interviewed mentioned.

In line with Vision 2030, Zambia intends to diversify its economy from relying on copper production and export to other sectors like agriculture and tourism. The study found that many potential clients of university extension education are interested to pursue studies related to the agriculture and tourism industries. When university extension education train many people in these industries, more employment opportunities would be created such as value addition to agricultural products. In Western Province, for example, a lot of mangoes and cashew nuts go to waste partly because people have not been trained how to process and add value to them to create wealth. University extension education can fill this gap by offering training in production and value addition to agriculture related products in the country to create more employment and wealth, enhancing development.

The hotel and hospitality industry is slowly growing in Western Province as could be evidenced by a number of lodges, safari camps, guest houses and restaurants mash-rooming in the province. The province has a number of tourist attractions such as the Liuwa Plains National Park, the mighty Zambezi River, the beautiful Barotse Plains and its associated Mongu-Kalabo Road and annual *Kuomboka* Ceremony, Sioma Ngonye Falls (second deepest falls on the Zambezi River after the Victoria Falls), Nayuma Musuem, a number of unique cultural artifacts and the Kafue National Park (largest and oldest in Zambia stretching over four provinces of Western, North Western, Central, and Southern) accessed by the Great Lusaka-Mongu Road. The lodges, guest houses and safari camps need trained human resource to enhance the industry. (See Plate 1 as an example of the tourist attractions in western Zambia.

Plate 1: View of the natural Sioma Ngonye Falls is one of tourist attractions in Western Province of Zambia



Source: photo by the researcher, 2015.

People trained in the hotel and hospitality industry could either be employed in the growing industry or start their own businesses, even just as safari guides.

#### **Enhancing facilitation of University Extension Studies among adult learners**

The study found that most of the clients in university extension education programmes in Zambia were youths, with few adults. For example, enrolment figures in Western Province in 2015 showed that out of the 155 learners enrolled, 78 per cent were below the age of 35 years. Only 22 per cent were over 35 years. In 2014, out of 99 enrolled learners, 80 per cent were below the age 35, with only 20 per cent over 35 years. In Zambia all people aged 35 years and below are considered youths ([www.zamstats.gov.zm](http://www.zamstats.gov.zm)). These youths can still be classified adults when compared to children. Anyone who qualifies to obtain a national registration card at the age of 16 years may be considered an adult in Zambia. Such a person can even be employed as a worker.

Admission to extension studies is open to people who have completed their secondary school education, with five or more levels including English. For one to obtain these qualifications, he or she must have completed seven years primary school education in addition to five years at secondary school. Entry to grade one at primary school starts at seven years. This means that normally one completes secondary school education at the age of nineteen years. Most of the youths admitted to university extension education programmes qualify to be adults following the age definition in Zambia's constitution where one can obtain a national citizenship identity card at the age of 16 years and allowed to participate in voting political leaders at the age of 18 years. Merriam (2001) explains that adults are more interested in learning things that have an immediate relevance on their job or personal life. Although scholars have defined an adult differently, a simple definition is "a person (man or woman) who has achieved full physical development and expects to have the right to participate as a responsible homemaker, worker and member of society" (Houle, 1972: 229). Research on learners has shown that adults learn differently from children (Knowles *et al.*, 2005).

The desire for growth - self-discovery, maturation, self-actualization - is one of the strongest motivations for an adult who seeks education (Brookfield, 1986). Adult learners, both as individuals and as groups, are very different from child learners and must be treated accordingly in the learning situation. Adults have special needs as learners and these should be taken into consideration when planning and facilitating training and learning activities for adults. Cardinal among these special needs is the *adult learner's status* in society. Some of our extension education clients are directors, managers, community leaders and people with various university degrees who want to get additional knowledge, skills, diploma or certificate for certain reasons. Facilitators of extension studies should always bear this in mind and treat adult learners with great respect. Successful university extension studies enhance sustainable development.

In the early 1970s an American Malcolm Knowles popularized the use of "andragogy," the term which describes differences between children and adult learners (Knowles, *et al.*, 2005). *Andragogy focuses on special needs of adult learners*. Knowles identified six cardinal assumptions about adult learning: (1) need to know, (2) self-concept, (3)



prior experience, (4) readiness to learn, (5) learning orientation, and (6) motivation to learn. By using a combination of adult learning techniques and strategies, extension studies facilitators can create training experiences that will enhance the learning of participants. Research in education has shown that people remember only 20 per cent of what they hear, 40 per cent of what they hear and see, and 80 per cent of what they learn by doing themselves (Brookfield, 1986; Pike, 1989). When adults actively participate in a positive learning experience that follows the six assumptions of andragogy presented in this paper, they are more likely to retain most of what they have learned and apply them in their work environment or other day-to-day life situations – contributing to sustainable development.

**The need to know:** Adults need to know why they need to learn something before undertaking learning (Knowles *et al.*, 2005). Facilitators of adult education programmes must help adults become aware of their “need to know” and make a case for the value of learning to improve quality of life as individuals, in communities and society – hence, contribute to national development.

**The learner’s self-concept:** Adults believe they are responsible for their lives (Knowles *et al.*, 2005). Adults have a self-concept of being responsible for their own decisions, for their own lives. Once they have arrived at that self-concept they develop a deep psychological need to be seen by others and treated by others as being capable of self-direction. As a person matures his or her self-concept moves from a dependent personality towards a self-directing human being (Knowles *et al.*, 2005). They need to be seen and treated with great respect as capable and self-directed. Facilitators of adult learning should create environments where adults develop their latent (hidden or suppressed) self-directed learning skills (see Brookfield, 1986; Banda, 2009).

**The role of adult learners’ prior experience:** Adults come into an educational activity with different experiences than children do (Knowles *et al.*, 2005; Merriam and Caffarella, 1999). Adult learners have individual differences in background, learning style, motivation, needs, interests, and goals, creating a greater need for individualization of teaching and learning strategies (Brookfield, 1986). Amazingly, the richest resource for learning resides in adults themselves; therefore, tapping into their experiences through experiential techniques (dialogue, discussions, games and simulations, problem-solving activities, or case studies) is beneficial (see Brookfield, 1986; Vella 2002; Vella 2004; Knowles *et al.*, 2005; and Banda, 2009).

**Readiness to learn:** Adults become ready to learn things they need to know and do in order to cope effectively with real-life situations (Knowles *et al.*, 2005). Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations. The readiness of an adult to learn is closely related to the developmental tasks of his or her social roles. Adults want to learn what they can apply in the present, making training focused in the future or that does not relate to their current situations, less effective.

**Orientation to learning:** Adults are life-centered (task-centered, problem-centered) in their orientation to learning (Knowles *et al.*, 2005). They want to learn what will help them perform tasks or deal with problems they confront in everyday situations and those presented in context of application to real-life (Merriam and Caffarella, 1999; Knowles *et al.*, 2005). For instance, adult learners pursuing business administration in Mongu town may be very eager to learn entrepreneurship and business market research so that they could be self-employed by starting their own businesses since the town has very few formal employment opportunities. Implementation of learnt skills can enhance growth.

**Motivation to learn:** Adults are responsive to some external motivators (e.g., promotion at work place, getting better job, higher salaries), but the most potent motivators are internal (e.g., self-esteem, desire for increased job satisfaction, solving day-to-day challenges, improving quality of life and the like). Their motivation can be blocked by training and education that ignores adult learning principles (Knowles *et al.*, 2005).

Andragogy urges facilitators to base curricula on the learner’s experiences and interests. Every group contains a configuration of idiosyncratic personalities, differing past experiences, current orientations, levels of readiness to learn, and individual learning styles. Thus, trainers should be wary of prescribing any standardized approach to facilitating learning (Brookfield, 1986). Understanding the six assumptions in andragogy prepares facilitators to create successful training.

### **Teaching and Learning Strategies for Adult Learners**

In line with Malcolm Knowles’ theory of andragogy, trainers or adult education and university extension studies facilitators should recognize that the richest resources for learning reside in adult learners themselves. Therefore, emphasis in adult education and extension studies should focus on experiential techniques that tap into the experience of learners, such as group discussions, dialogue, problem-solving, case studies, games and simulation exercises, field trips and role play, instead of primarily using transmittal techniques such as lecture (see Brookfield, 1986; Knowles *et al.*, 2005; and Banda, 2014). Using a combination of the following teaching and learning strategies may have the

greatest impact. Always bear in mind that people remember only 20 per cent of what they hear, 40 per cent of what they hear and see, and 80 per cent of what they do by themselves (Brookfield, 1986; Pike, 1989).

### **Lecture**

Lecture, a transmittal technique, is still the method most widely used in teaching adults in many parts of the world (McKeachie, 2002). However, lectures should be used in 15 to 20 minute sections spaced with active learning activities to re-energize participants or learners for the next wave of information (Middendorf and Kalish, 1996). Lectures are useful for presenting up-to-date information; summarizing material from various sources; adapting material to the background and interests of a group at a particular time and place; helping learners read more effectively by providing orientation and conceptual framework; and focusing on key concepts and ideas (McKeachie, 2002). Lectures can create interest in new topics, motivate learners to research further, or challenge ideas they have previously taken for granted.

### **Problem-based learning**

Problem-based learning is an instructional strategy that encourages critical thinking and problem-solving skills. Participants confront contextualized, ill-structured problems and strive to find solutions (Freire, 1993; Banda, 2011, Banda, 2014). The trainer is in the role of a facilitator to stimulate, guide, integrate, and summarize discussions.

Strategies for problem-solving with adults include role plays, theatre for development, games and simulations. An example of problem-based learning in a business administration course could be one based on fishermen who make an average of K100 daily from their fish sale in Barotse plains of Mongu, Senanga, Kalabo, Limulunga and Nalolo districts in Western province. Most of these fishermen do not save their money with banks but keep the cash in their fishing camps or homes. Life seems very good for them in the nine months when fishing is legally allowed. The fishermen are happy; they eat and drink whatever and whenever they want to, knowing they would make more money the following day. However, these fishermen tend to starve and often ask for food relief in January during the fish-ban period. Some even fail to send their children to school in January because they did not plan or save any money for such. The problem-based role play on this scenario could stimulate adult learners to participate in problem-solving to improve quality of life.

### **Dialogue**

In the dialogue education approach, the idea of dialogue is used in contrast to the monologue approach often seen in traditional adult education, whereby teachers present information to learners who receive information without engaging with it (Vella, 2002; Banda, 2009, Banda, 2014). A dialogue approach to education views learners as subjects in their own learning and honours central principles such as mutual respect and open communication (Vella, 2002).

Dialogue education promotes reciprocal conversation based on mutual trust and respect for each participant. Learners are invited to *actively* engage with the content being learned rather than being dependent on the educator for learning. Ideas are presented to learners as open questions to be reflected on and integrated into the learner's own context (Vella, 2004). The intent is that this will result in more meaningful learning that has an impact on behaviour. Careful to approach the learners as equals. Dialogue education promotes effective communication characterized by constructive feedback between the educator and the learners as well as among the learners themselves. This enhances cross-pollination of ideas and knowledge.

To illustrate, Freire (1993) used pictures to remind learners of a problem in their lives, and *through dialogue he led them to examine causes and effects and possibilities for action*. The written word was then introduced to anchor the learners' insights. They wrote words for ideas that aroused powerful feelings, and then later as they read their words they could return to those insights, debate them, and create further insights. In this dialectical manner, Freire's pedagogy could raise his adult learners' consciousness. "In dialogue education, listening by both the learner and facilitator is very important as it is directly connected to our ability to think about and remember information" (Banda, 2009:32).

Dialogue differs from discussion in that in discussion one is presenting ideas back and forth with the goal of coming to agreement or conclusion, while in dialogue the goal is to experience the process of deep listening and communicating rather than the outcome of a decision. It promotes critical thinking in the citizenry and creates knowledge in society. As Vella (2002, 2004) points out, if the general aim of a discussion-cum-learning group is to make learners think and converse freely so that the flow of communication is kept in order, adult educators have to maintain a low profile and, if necessary, withdraw for a while at times. In other words, the conversation in the group should flow from learner to learner with less control by the educator. However, discussions of such situations are

more likely to take the form of an aimless chat. It is, therefore, necessary to make the learner group work on specific tasks of common interest and concern.

Successful adult learning requires an approach that reflects the relationship between learning and real life and recognizes the need for motivation towards the process, in addition to the necessary confidence and learning skills. Therefore, learning involves people taking responsibility for their own learning, while the task of “educators” is to provide an environment in which this can be done most effectively. *The participatory approach thus teaches adults how to understand problems, identify their needs, analyze those problems and needs and prioritize them and evolve methods of encountering and solving those problems and meeting the identified needs* successfully both at individual and group levels (Mtonga, 1986 and Burbules, 1993 cited in Banda, 2009). Dialogue education stimulates and enhances all round development among adult learners, in communities and in society.

### **Case studies**

Case studies are narratives, situations, data samplings, or statements that present unresolved and provocative issues, situations, or questions. Case studies tend to challenge adult learners to analyse, critique, make judgments, speculate, and express opinions (Indiana University Teaching Handbook, 2004). Case studies bring real-world problems into the training and any other learning situation. They ensure active participation of university extension studies participants or other adult learners and may lead to innovative solutions that can enhance sustainable development in communities, society and the world. Use of case studies can result in better retention, recall, and use of learning outside the training (McKeachie, 2002).

In a public administration or human resource management course, an example of a case study on goal setting and self-motivation among adult learners could be that of Thomas Alva Edison who invented the electric bulb. Edison (cited in Burns, 1989) failed thousands of times before he succeeded. Failure did not make Thomas Alva Edison give up; instead, he used it as a stepping stone to achieve his goals. Success does not mean the absence of failures; it means the attainment of ultimate objectives or goals. More importantly, Edison used self-motivation to act to achieve his goals. Action is the only way through which goals are going to be achieved after being written down. Opportunities become fruitful only to the motivated. To achieve happiness and success in life, one has to set achievable goals and be strongly motivated. Self-motivation to achieve one’s set goals can be said to be the key to happiness and success in life. Self-motivation has two dimensions (Maslow, 1943). One is mental, i.e., related to the mind...to think where we want to go and what we want to do in life. The other is related to action, where one has to act to achieve what one wants. Self-motivated people determine their goals and act to achieve them. Thomas Alva Edison invented 2001 items along with the electric bulb because of self-motivation (Burns, 1989).

Motivation helps people to approach their work and other aspects of life positively. It helps to set goals and define quality missions, leading an individual, a family, community, organization or nation to the intended destination. Motivation can refer to a desired behaviour towards achieving larger good, lofty goals addressing the societal needs (Maslow, 1943). Furthermore, motivation demands that if we are going to succeed in reaching our goals, we should give them all we have. To do this, it demands a total commitment of devotion, determination and dedication. Devotion is largely a matter of attitude. Dedication is the highest form of devotion. It focuses on the accomplishments of one’s goals. It is part and parcel of positive thinking. In life, goals are very important. They give purpose and direction. The important thing is to establish goals which you feel in your heart you want to achieve in order to bring happiness to yourself and to others. Self-motivation will drive you to achieve your goals. The most important step in self-motivation is believing in oneself - self-confidence. Belief in one’s self is the very basis of successful self-motivation. Belief in oneself helps to develop a positive attitude in life, cardinal in self-development.

### **Educational games**

Educational games involve learners in competition or achievement in relationship to a goal; the game teaches and is fun (McKeachie, 2002). Many educational games are simulations with the goal of modeling real-life problems or crisis situations. One advantage of educational games and simulations is that they encourage participants or learners to confront their own attitudes and values through involvement in making decisions, solving problems, and reacting to results of their decisions (Freire, 1993). Life is a mixture of joy and suffering, of success and failure, with disappointments and worries sometimes outweighing the good aspects. Such aspects are governed by one’s attitude. Attitude can be described as the manner in which a person views life. Attitude constitutes the way one sees situations, understands them and faces the troubles and difficulties that such situations may perhaps bring. Depending on one’s attitude one can make one’s life in this world a success or failure.

Attitudes can be developed and nourished. Nothing can stop a person with the right attitude from achieving his or her goals in life. The right attitude enables a person to use his or her abilities to gain the maximum from them. We can, whether rich or poor, with the right attitude, achieve our goals in life by developing character, working hard, and keeping our mind on our definite objective and continually striving for it with faith that it will be achieved. Attitudes are important to life. A positive attitude makes a difference in one's life. It is, so to say, the difference between success and failure, between growth and being stunted. It opens the mind, expands it to search for new opportunities and to grow, to reach out, to touch other lives and reach self-actualization – cardinal in adult education. Educational games can effectively be used to enable adult learners develop positive attitude to life, contributing to individual growth, community and national development.

### **Role play**

Role play is used to assist learners or participants in experiencing feelings and practicing skills (McKeachie, 2002). Role play is defined as an experience around a specific situation that contains two or more different viewpoints or perspectives. Situations can be written as a prepared brief, and different roles or perspectives are handed out to different people who discuss the situation. The situations should be realistic and relevant. The most successful scenarios develop a skill or change attitudes for better quality life. Through use of role plays, university extension studies facilitators can successfully assist adult learners acquire utilitarian knowledge, skills and attitudes which can be applied in various situations of their operations in life to develop themselves and contribute to national sustainable development.

### **Discussion**

Discussion is the prototypic teaching for active learning similar to what we experience in dialogue education (McKeachie, 2002). Discussion encourages learners or other participants in activities organized by university extension programmes' facilitators to discover solutions and develop critical thinking abilities (Teaching Concerns, 1993). Discussion allows learners to be active and experience personal contact (McKeachie, 2002; Indiana University Teaching Handbook, 2004). Trainers and educators or facilitators using discussion pose a problem, monitor discussion, and summarize when completed. Discussion and dialogue education techniques are superior to lectures in adult learners' information retention; transfer of knowledge to new situations; problem solving, critical thinking, or attitude change; and motivation for further learning (McKeachie, 2002). Studies show that over a period of three days, learning retention is as follows:

- i) 10% of what you read.
- ii) 20% of what you hear.
- iii) 30% of what you see.
- iv) 50% of what you see and hear.
- v) 70% of what you say.
- vi) 90% of what you say as you do (e.g., orally work out a problem) (Pike, 1989).

Eduard Lindeman, also writing in the 1920s, proposed that adults learn best when they are actively involved in determining what, how, and when they learn (Lindeman, 1925). Since the 1970s, several authors and training experts have expanded upon the original concepts presented as adult learning theory.

### **Field trip**

A field trip can simply be defined as any teaching and learning excursion outside of the classroom (see McKeachie, 2002). Though rarely used, educational field trip has for long been a major effective exciting part of the education programming for both youth and adults world over. Well-planned and implemented field trips are cardinal among adult learners for various reasons: (a) to make a connection between reality and theory – hands-on; (b) can be used as an introduction to a topic unit or a culminating activity; (c) to provide an authentic learning experience; (d) it is exciting as learners get to meet and interact with real life situations and others; (e) learners can experience all five senses of see, touch, feel, smell and taste; and (f) learners remember the field trips because they learn using a different methodology, hands-on.

An educational field trip can be an integral part of the instructional programme in university extension studies. Good field trips provide learners or participants with first-hand experience related to the topic or concept being discussed in the programme. They provide unique opportunities for learning that are not available within the four walls of a classroom. For example, learners can visit a museum, a local supermarket, a cultural festival, an industry or a recreation place to learn. For example, learners pursuing adult education programmes in Mongu town or Lusaka city

in Zambia can learn on importance of budgeting for a home and dangers of impulse buying by visiting nearest Shoprite supermarket and observe how many people actually plan what they are to buy when going to a supermarket. The ultimate adult educator knows that experience is a rich resource for adult learning and therefore actively involves adults in the learning process.

Ultimate instruction, as discussed in this work, means helping adults to learn and involves far more than lecturing or presenting information. It involves the use of various facilitation techniques for results - powerful, highly effective techniques that results in applicable learning for adult participants. The techniques presented here are intended as a guide for both new and experienced trainers and adult educators. The reader is encouraged to adapt these ideas and techniques freely and to modify them as necessary to compliment his or her unique style of instruction. You, too, can become an ultimate university extension studies adult educator.

### Conclusion

It can safely be stated that the whole point of adult education – which includes university extension studies - is to help people, particularly adults to contribute to, promote, and participate in national sustainable development. The paper has also discussed that for adult educators or facilitators of university extension education programmes, assessing educational needs for adult learners and potential clients is extremely important and sometimes a difficult part of the programme planning process. Needs assessment can also be a challenging process for the adult education or university extension studies practitioners. It may be tempting to simply utilize familiar methods such as questionnaires or observations as ways to determine what educational activities the university extension education provider should offer its' adult learners. These techniques, however, may provide inaccurate information about the educational needs of the potential clients.

The paper has further outlined that by using combinations of adult learner techniques and strategies, extension studies facilitators can create training experiences that will enhance the learning of adult learners. When adults participate in a positive learning experience that follows the six assumptions of andragogy presented in this work, they are more likely to retain what they have learned and apply it in their work environment or day-to-day situations to contribute to individual, family, community and national sustainable development in Zambia, and world over.

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