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The benefits of university extension education to its stakeholders and possible improvements

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Abstract

The purpose of the study was to investigate the benefits of university extension education to its stakeholders and possible improvements. The objectives were to establish the benefits to the graduates, students and members of staff. A mixed method design was employed in which questionnaires and an interview guide ware used to collect data from a sample of 231 respondents. The respondents consisted of 100 students, 100 graduates, 30 part-time tutors and one resident lecturer. The findings showed that graduates, students, tutors and the resident lecturer benefited from participating in university extension education including the (1) acquisition of knowledge; (2) employment both in the formal and informal sector; (3) income acquisition and increased earnings; (4) ability to meet family responsibilities; (5) upgrading of qualifications; (6) opportunity to study while working; (7) involved in the cheapest form of education; (8) to go for further studies; (9) chance to change career or receive promotion; (10) change of attitude and gain of recognition and respect from society which lead to improved self-esteem. Possible improvements to university extension education included the need to: (1) set up libraries and computer labs; (2) building and buying infrastructure; (3) improved communication by administration; (4) employ qualified tutors; (5) market university extension education programmes; (6) formation of a student's union; (7) upgrade diploma programmes to degree and run as a directorate; (8) establish recognition of courses being offered; (9) provision of uniform teaching and learning materials; and (10) improve funding and employ more workers in the provinces. In view of these findings, the university management should consider improving the management of university extension education by reforming the unit into a directorate, improve the remuneration of tutors and providing libraries and computer laboratories in all the Provincial Centres of the University.

Keywords: University extension education• stakeholders in extension education•formal and informal sector of the economy•income acquisition•teaching and learning materials

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Introduction

The term extension has its origin in the Latin word 'tensio', referring to 'stretching' and the prefix 'ex', referring to 'out'. Therefore, the word extension literally means 'stretching out'. The Zambian university extension education, in particular, is as old as the University of Zambia. Chakanika and Mtonga (1995) state that extension education in Zambia has its origin in the Department of Extra Mural Studies. Similarly, N. K. Sichula (2016) says University Extension Education in Zambia has its origins in the Department of Extra-Mural studies now known as the Department of Adult Education and Extension Studies. Historically, it can be traced back to the year 1966 when the University of Zambia was opened. The Extra-Mural Studies department was established as a result of the Lockwood Commission which was set up in 1963 and recommended the establishment of the university (Sichula, 2016). However, in spite of this form of education existing for a long period of time in Zambia, research

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on the benefits of university extension education to its stakeholders and ways of improving service provision has been lacking. This has the potential to kill the programme as it may gradually fall into being irrelevant to the needs of society.

University education and human development

University extension education is connected to the process of development in developing countries (W Wanga. Chakanika & Sichula, 2016). Largely the attainment of development is dependent on the effective mobilisation and efficient utilization of the abundant human resource to address factors of under development (Sichula, Luchembe, & Chakanika, 2016). In Zambia, the absence of skilled and qualified human resources led to, amongst others, the introduction of extension work, which has been used extensively as one of the most potent instruments for urging people to transform their environment constantly with their aspirations (Chakanika, Sichula, & Luchembe, 2016; Sichula et al., 2016). University extension education in Zambia was primarily established to maintain the university link with the community in general. This aim was based on the premise that the university had a contribution to make to society as a whole and not only to a small group of undergraduates but to graduates on campus as well (Alexander, 1975:31).

Therefore, the objectives of the Centre for Extra-Mural Studies or Extension Education in Zambia included the provision of knowledge and skills for students to enable them to attend university education and continue with professional development, vocational training and retraining through short courses and seminars, provision of specialist advices and assistance to sections of communities which might need it (Alexander, 1975:39). According to Shannon and Schoenfield (1965), university extension is an institutional state of mind which views the university not as a place but as an instrument of knowledge sharing. Translated into an operational philosophy, extension education puts a challenge to the community of scholars to make themselves as useful as possible to the whole society, or at least to the community from which the institution draws its inspiration and support. According to Lin (2009), university extension education is the best channel for integrating regular and irregular education and learning resources, they provide the general public with the channel for certifying their achievement of learning.

The other purpose of university extension education is disseminating knowledge to the general public and providing the learning opportunities for the adults who at some point discontinued schooling during their childhood and would want to continue studying or update their knowledge and skills (Sichula, 2016; Bowl, 1992). Shannon and Schoenfield (1965) give an account of the birth of extension education in the United States of America. They say, on the 31 December 1899, America entered not only a new century but a wholly new era. The people themselves were changing and schools began producing a citizenry of unprecedented literate individuals. Many immigrants came to America and their institutions, ideas and cultures were new and different from those of indigenous Americans. This means a new environment was fostering an American citizen who would make own contributions to Western civilization. Among them included a commitment to work and making learning responsive to the needs of the people. Subsequently, the change in places of residences led to the birth of extension education especially when the frontier farming settlement began to grow. Evidently, 1900 subsistence farming was growing. The 1900 census marked the first time that those employed in industries outnumbered those employed in agriculture. Production farming required new know-how and city living raised a multitude of problems in housing, sanitation, social and racial adjustments, and government (Shannon and Schoenfield, 1965:6). All these necessitated the provision of extension education services.

Furthermore, the change and an increase in technology led to the growth of extension education in America. For example, the year 1900 brought the first automobile show to promote the new-fangled horseless carriage. Coupled with a million and a half telephones in use and mechanization of agriculture to which extension education became crucial (Sichula, 2016). This meant that the country was poised for an explosion in science and engineering that was to demand untold technological skills and transform home and business lives (Shannon and schoenfield, 1965:6). Further, lifestyle changes of the unusual concentration of educational leaders who shared a vision of a new university that would help lift the life of the nation to higher planes by bringing educational resources to bear on community problems in the spirit of the progressive era pointed to extension education (Shannon and schoenfield,

1965:7). On the other hand, the origin of extension education in Britain came about because there was a need to develop human resource as a result of the rapidly growing industries (Sichula, 2016). It was also aimed at reducing high levels of illiteracy, especially in rural areas. Further, there was a need to help farmers learn new knowledge and skills with respect to farming methods and techniques (Sichula, 2016; Mannheim, 1958). This shows how relevant extension of education has been to the development of many societies. As such for a long period of time in Zambia many people have studied and continue to study through university extension education. But the authors of this article wondered whether the programme has benefited its stakeholders or not (graduates, students and members of staff); and if there are areas for possible improvements to the programme. It was on this premise that the study was undertaken.

Methodology

This study used a case study research design in which qualitative and quantitative methods were used (Kombo and tromp, 2006). N. Sichula (2018) explains that a research design helps in the organisation of strategies and the development of steps necessary for undertaking a study. It also helps to ensure that adequate steps are followed in producing trustworthy findings. In this article, a research design was used to refer to all the septs of the research process followed in this study. The total population included graduates from university extension education programmes from the year 2005 to 2012, the students who were currently studying and members of staff under the department of adult education and extension studies. According to Castillo (2009), population refers to the entire group of individuals or objects under study. Additionally, Sichula (2018) citing Kumar (2014) says by nature mixed method research uses both probability and non-probability sampling of research participants. Specifically, qualitative research follows non-probability sampling because it is based on understanding a phenomenon as experienced by the research participants in their real life context (Kumar, 2014).

On the other hand, quantitative research methods use probability sampling with a view to giving every participant an equal chance to participant in the study (Babbie, Mouton, Prozesky, & Vorster, 2006). For this study, the sample population was 231 participants. This comprised 100 students who were sampled as key informants on University extension education provided in Lusaka Province. Through purposive sampling procedure, 100 graduates were sampled through snowball sampling procedure, 30 tutors were sampled through simple random sampling procedure and one resident lecturer who was selected using purposive sampling procedure. Data was collected using questionnaires and an interview. Questionnaires were self-administered and were used to collect the data from the graduates, students and tutors. Whereas an interview was physically conducted by the researcher. This study had two sets of data and was analysed according to the type of data collected. First, data analysis in this study refers to the categorising, summarising and ordering of the data and describing them in meaningful terms (Sichula, 2018; Moore and Mc Cabee, 1989). Therefore, the qualitative data were analysed qualitatively using thematic analysis and quantitative data were analysed quantitatively by defining variables, coding and generating tables of frequencies and bar charts by using SPSS version 21.

Findings

The findings of the study show that students were benefiting by gaining knowledge and skills that would enable them to gain employment and become independent and self-reliant. The graduates gained employment, started their own businesses, some of them were promoted to higher positions of work and others had a change of attitude and life perceptions. Tutors have benefited by earning an income, gaining more knowledge and tutoring experience. The Resident Lecturer learned how to interact with various communities without any struggle and gained experience in managing University Extension Education programmes. Figure 1 below summarises the benefits that accrued to the stakeholders.

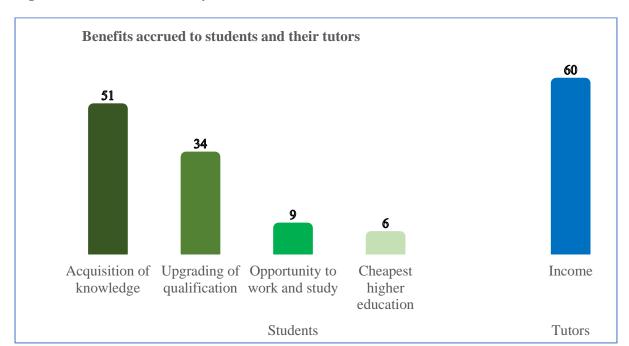


Figure 1: Benefits of university extension education to its stakeholders

Figure 1 above shows that 51 students benefited from university extension education through the acquisition of knowledge, 34 benefited through the upgrading of their qualifications, 9 benefited is the sense that university education provided an opportunity for them to work and study at the same time and 6 students benefited through the competitive cost of university extension education. It was described as a cheaper way of obtaining higher education. For the 60 tutors, the benefits accrued as an income obtained from tutoring learners in different courses.

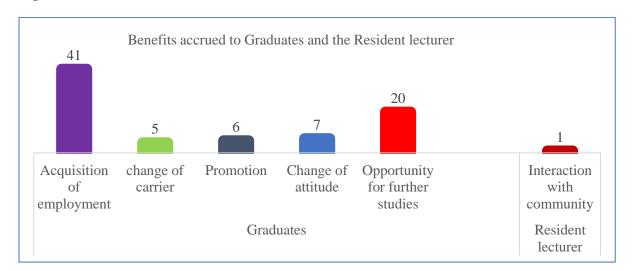


Figure 2 Benefits to the Graduates and the Resident Lecturer

Figure 2 above shows that 41 graduates benefited from university extension education through the acquisition of employment, 20 had opportunities to further their studies, 7 had their attitude towards life changed, 6 were promoted at their places of work and 5 were able to change their carriers. For the

resident lecturer, the benefits were on improved interaction with the clients and the community, thereby, improving the management of extension studies.

Aside from the benefits to its stakeholders the study established areas of possible improvements to extension education. Figure 3 below shows the improvements suggested by the students and their tutors.

Figure 3: Improvements suggested by students and their tutors

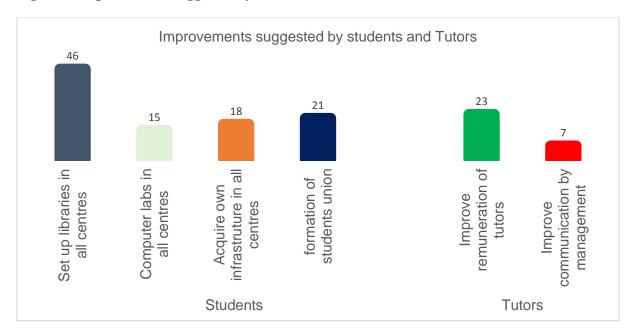


Figure 3 above shows that 46 students suggested the need to sut librariy facilities in all provicial centres, 21 students said they need a form a students union that would address their specific concerns as diploma and cerficate students. 18 students suggested that the university need to acquire their own infrastruture in the provincial centres and 15 students suggested the need to set up computer laboratories.

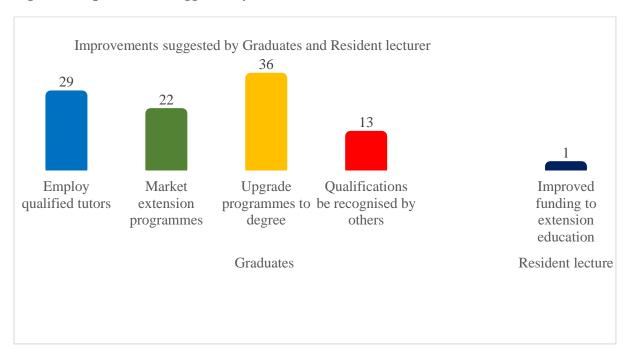


Figure 4: Improvements suggested by Graduates and the Resident lecturer

Figure 4 shows that 36 graduates suggested an upgrade of extension programmes from diploma to degree programmes. 29 graduates suggested that there is need to employ more qualified tutors, 22 suggested the improvement in the marketing of extension programmes and 13 said the qualifications from extension studies should be made more recognisable by other stakeholders.

a. Benefits of university extension education

The study established that participants in university extension education had benefited by acquiring knowledge and skills that they never had before participating in the university programme. This is in line with Luchembe (2010) who says university extension education offers courses to impart knowledge and skills to help people with ever changing demands of life at work. This change takes place in social, political and economic spheres. From the finding, it was observed that the courses offered provided employment opportunities for most of the participants. This points to Hakala (2008) who indicates that education has an economic benefit of strengthening the country's economy by empowering people for entrepreneurship and employment. When citizens of a nation have an education, the nation's economy is strengthened. They are qualified for jobs and unemployment is likely to reduce, innovation and creativity in the work places soars. The participants indicated that their participation in university extension education leads to income acquisition and increments for others. In line with these findings, Richardson and Moore (2000) explain that many times extension programmes help participants gain new skills that enhance their job prospects, leads them to adopt innovative practices that increase their yields or make other decisions that cause them to increase their income. The value of these extension programs is in increased income acquisition.

From the findings, it was also realised that participants in University Extension Education had a number of responsibilities which they managed to meet as a result of participating in extension studies. They managed to meet these responsibilities because extension studies empowered them with the knowledge and skills necessary to perform their tasks (Chakanika and Sichula, 2016). In other words, we can say that these courses help participants meet their educational, social and economic needs. In a meeting that the then Vice Chancellor Professor Stephen Simukanga had with extension education students and tutors he said: "that there is no restriction for extension students who wanted to upgrade to degree programmes". He further said that those who were studying a diploma in social work would only take one year six months to complete their degree programme when they come to the main campus great east road. However, the reality of this has remained far-fetched (Sichula, 2016).

In their convictions, the graduates and student believed that the qualifications from university extension education would enable them to become eligible for further studies in other university programmes. They alluded to the fact that their participation in extension studies opened doors for them to obtain their first degrees and master's degrees. According to the American Educational Partner's Placement Team (2010), one of the biggest benefits to participants of extension education is the ability to upgrade their qualifications and work skill. Performance on the task or job is also improved. This demonstrates two things to their employers. First, it shows that they care about their job and that they can be valuable to the company. Skills and knowledge gained help graduates to secure their jobs. For instance, computers have become a necessity in our everyday work. Every company needs them and all employees are expected to upskill technologically for them to remain relevant (Sichula, 2016).

This study established that participants in university extension education who were working had an opportunity to pursue their education whilst in employment. Respondents confirmed that they were able to attend lectures without asking for study leave from their employers. Those who had rigid supervisors were hindered to develop themselves and their organisations. Others managed to carry out their studies without getting into conflict with their superiors because of study leave. In light of this, Luchembe (2010) observes that university education through adult education and extension studies provides a beacon of hope to all eligible Zambians who want to pursue a university education. This is because university extension education provides a more flexible mode of study in that even those that are working or doing business can also find time to attend lectures. Secondly, it has decentralised its study centres by conducting classes not only in the capital city of Lusaka where the main campus of the University of Zambia is situated but also has centres in nine of the ten provinces in Zambia. Based on the findings of the study, this form of education enabled students who had no sponsors to raise funds for their study through formal employment and business during the day and attend courses in the evening.

The Resident lecturer and the tutors attested to the fact that adult education and extension studies provide the most affordable form of education in terms of payment. They said compared to other tertiary institutions in Lusaka offering diploma programmes, extension studies were the cheapest and had flexible terms of payment. According to Richardson and Moore (2000), one of the principles of university extension education is to ensure that the cost of this type of education is affordable to members of various communities especially the poor. Reduced expenditure that participants realise can often be easily identified in determining the economic impact of the programs. Careers can be considered as a life sequence of jobs. This means that a person's career is a series of jobs held during the course of that person's life (Stone, 2008). The study revealed that university extension of education had given its participants an opportunity to change their careers. The skills and knowledge obtained by graduates have enabled them to escape from routine jobs and get promoted. Gillard (2005) defines routine as a habitual or fixed way of doing things. Many people in work places become tired of doing the same thing over and over, as work tends to lose meaning and direction. The work activities become boring in such a way that this situation leads to inefficiency even if one had received adequate training in a particular job. But extension education graduates are able to escape from this routine work because acquired new qualifications enable them to change career.

Completion of a university extension programme provides participants with the prestige of having earned an education qualification from a university. This accomplishment can be added to students resumes and help them advance their career or even change it (American Educational Partners Placement Team, 2010). Results obtained from the Resident Lecturer, Tutors and graduates showed that extension studies provide chances for participants to get a promotion at their places of work. As indicated earlier, many people especially in the education sector, have been stuck to one position for a long time. As authors of this article we believe that for one to move from one position in any organisation, it is crucial to attaining an education qualification that will give them the advantage to be considered for a promotion. According to Richardson and Moore (2000), many times extension programs produce very intangible results of the change in human behaviour that can be evaluated but not easily due to their non-tangible nature. These non-tangible benefits are mostly in human terms that range from an increase in educational level, change in attitude and aspiration. Although the participants indicated a change in attitude as one of the benefits of extension education, as authors of this article we do not think that this change in attitude is directly attributed to receiving education through extension education alone. Change in attitude is non-tangible, difficult to measure and often subject to a number

of factors. The findings revealed that the respondents believed that they gained recognition and respect from society because of participating in university extension education. Richardson and Moore (2000) say that participants in extension programmes improve the quality of life, self-esteem and gain respect from members of society. They also demonstrate great leadership skills in their work places and communities.

b. How to improve the Provision of University Extension Education

From the findings, it was revealed that all the respondents suggested that in improving the provision of university Extension Education there was a need to set up libraries and computer laboratories in all the centres. According to Nduna (2010), to improve the efficiency and effectiveness of university extension education, resource centres should be constructed in all the centres. He believes that this would help both the tutors and the learners to study for the various courses they were participating in. This concretizes what Mandumbwa (2011) suggested when he said that the Department of Adult Education and Extension Studies and the university of Zambia library management should ensure that the library section at the resident lecturer's office is provided with recommended books and references in the courses that are being offered in a particular province. This will lead to an improvement in the learning and quality of education being provided under university extension education. In line with the provision of computer laboratories, Ngoma (2009) explains that the acquisition of more computers which must be made available to the learner will enable them to practice computer skills and conduct online research.

Conducting online research helps to improve the quality of the research work since learners will be able to get current information on their particular fields of study. Firestone (1996) alluded to the fact that a computer is a powerful tool for improving, motivating, and incentivising for learning. The respondents indicated that there was a need to improve tutor remuneration and other conditions of service. This is in connection with what Mandumbwa (2011) discovered that part-time tutors were not pleased with the conditions of service especially the mode and amount of their remuneration. To improve the provision of University Extension Education payments for part-time tutors should be processed on a monthly basis. This measure would reduce the tax reduction incurred by tutors and maintain the operation cost on the part of university management. It will, in turn, motivate part-time tutors to be efficient and effective in carrying out their tasks and will attract qualified staff to participate in the delivery of University Extension Education.

Basu (1994) explains that Fredrick W. Taylor, the father of scientific Management believed that people would work hard if they are paid well. Hakala (2008) said that improvement in physical working conditions and company policy leads to job satisfaction. According to Stone (2008), remuneration is one of the most important Human Resource functions. It can help to reinforce the organizations' culture and key values and to facilitate the achievement of its strategic business objectives. By rewarding desired results, an organisation's remuneration is able to motivate employees to improve their performance continually and to strive to achieve the organizations strategic business objectives. Remuneration also attracts and keeps the desired quality and mix of employees. This means that the University of Zambia must consider revising the pay structure for the tutors.

In the same vein, Ngoitiana (1991) said that there are two main incentives for extension workers which are considered crucial in the provision of better extension services and training. These are improved salary and promotion. According to an evaluation study of the Home Economics Assistants in Tanzania, the absence of the two incentives has had a negative impact on the work and morale of extension workers. To encourage efficiency and effectiveness among extension workers they must be promoted and their remuneration must be increased. Other incentives like book allowance, overtime and research funds just to mention a few must be provided. Findings from students and graduates indicate that building and buying infrastructure is the only way the provision of university extension education can be improved. This confirms what Luchembe (2010) meant when he said that infrastructure is a challenge that is being faced by university extension education. There is a lack of lecture theatres. Most university business in provincial centres is transacted in rented buildings, as a result, it is difficult to buy and install facilities that make learning and teaching easier in such environments. This is because accountability would be difficult if something was broken or stolen. Thus, buying and building of our own infrastructure as university extension education would make the

provision of this form of education easier. And it will become less costly for the university because they will stop paying huge amounts in rentals.

The Resident lecturer said the University of Zambia should buy or build its own infrastructure in order to avoid rental costs & use the money for other projects. The findings also revealed that students and graduates suggested that the university employs lecturers on a permanent basis as opposed to the practice of short term contracts for tutors. This is connected to what Ngoma (2009) meant when she said that there is a need to recruit more part-time tutors who are qualified and specialized in their various fields. For example, if one is an adult educator that is what they should lecture on and not any other course. The marketability of university extension education partly depends on the quality of the teaching and lecturing staff. Such professionals must know how to handle Adult learners. Ngoitiana (1991) also noted that in Tanzania, it had been difficult to obtain extension workers with the right qualification and experiences to lecture in extension programmes. Until 1988, qualified extension trainers were drawn from three major sources: colleges and universities; serving rural development staff and technical instructors from specialized government departments. These trainers only train in the fields of their qualification.

The research revealed that respondents suggested that University Extension Education programmes needed to be packed and marketed by using the media. The respondents assumed that the advertisement of the programmes offered by the University of Zambia under the Department of Adult Education and Extension Studies would increase the popularity of the programme. They also believed that such publicity would lead to increased enrolments in the various programmes offered. And that this may change people's negative perception of adult education and university extension education. The research further revealed that several students suggested that diploma courses that were being offered should be upgraded to degree level. The resident lecturer also had the same suggestion. He said that diplomas must be upgraded to degree programmes and that University Extension Education must be allowed to run on its own as a directorate. According to Mulenga (2019) obtaining university, degrees are relevant for both personal and professional development as well as upward mobility socially, financially and culturally. The New Zealand Qualification Authority (2015) concretizes on the fact that better career and employment opportunities are limited for diploma holders. University graduates specifically with degrees, Masters and Doctorate have the knowledge and skills that qualify them for wider career choices and promotions in their working environments. Though all career paths are different and generalisation are not true for all jobs, earning a university degree gives one skill as well as knowledge for career success. University education broadens one's horizon and educates the on analytical thinking (Mulenga, 2019).

Earlier, the research results revealed that some respondents said that the course they were pursuing (infection prevention) would not enable them to gain employment because they had discovered that it was not registered with the Ministry of Health who are the major employers. Hence, when it comes to suggesting how we can improve the provision of university extension education the respondents said that the University of Zambia should help establish recognition to courses they are offering. On how to improve the provision of university extension education it was suggested that uniform teaching and learning materials be provided to all university tutors and learners. Further, findings obtained from an interview with the resident lecturer pointed to the fact that the provision of uniform teaching and learning materials would make teaching and learning easier especially in rural areas where it was not easy to find study materials. The resident lecturer also said that university central administration should adequately fund the programmes. He further suggested that the University of Zambia must employ more workers in all the provinces so that the management of university extension education programmes becomes more effective. In line with these findings, Nduna (2010) advised that the university should ensure that the provincial offices were adequately staffed in order for the units to achieve their aims and objectives; that of providing education to all the people, however, remote they may be.

Conclusion

This article concludes that university extension education is beneficial to all participants and stakeholders through the acquisition of knowledge and skills. As evidenced by the findings some participants were able to gain employment and ultimately take care of their families. University

extension education has given students and graduates an opportunity to go for further studies. Because of its flexibility, extension education has enabled students to study whilst working. The article concludes that the suggested improvements affect every aspect of university extension education. This includes the provision of university extension education, infrastructure, teaching and learning materials, tutors remuneration, communication between administration and students, library and computer laboratories, and recruitment of qualified tutors and improvement of marketing strategies for extension programmes. We believe that these suggestions if thought through carefully would greatly benefit the university management and all staff involved in university education. To this effect as authors of this article we would like to recommend that the general welfare of staff and services provision be improved by specifically expediting and completing the professional accreditation of programmes to professional bodies, improving the infrastructure in all the provincial centers, teaching learning materials, remuneration of teaching staff and procuring the necessary equipment for extension work. This undertaking is necessary for the improvement and sustainability of university extension education programmes of the University of Zambia in this country. It is undoubted that university extension education remains a link between the University of Zambia and the community.

References

- Alexander, D. (1975). Origins and Development of University Extension in Zambia, 1966-1975. *Occasional Paper No. 3*, Lusaka: CCE.
- Alexander, D. (1975). Night School Teacher Discussion Groups in Zambia 1974-75. *Occasional Paper No. 2*, Lusaka: CCE.
- American Education Partners Placement Team (2010). *Extension Programmes for International Students Fast- Track to a better Career*. Accessed on 07/05/2013from hpt://www.amricanedepartners.com.
- Babbie, E., Mouton, J., Prozesky, B., & Vorster, P. (2006). *The practice of social research* (South Africa ed.). Oxford: Oxford University Press.
- Bowl. R. (1992). University adult education: Backwards or forwards? *Studies in the Education of Adults*, 24(2), 199-216.
- Chakanika, W. W. and Mtonga, H. L. (1995). *Constraints of University Extension Education Work in Zambia. The Experience of two Resident Tutors*. Lusaka: The University of Zambia.
- Chakanika, W. W., & Sichula, N. K. (2016). The University of Zambia's extension programmes are based on the felt needs of the society: a fallacy or reality. In W. W. Chakanika, N. K. Sichula, & M. Luchembe (Eds.), *University extension education in Zambia: A reader*. Lusaka: UNZA Press.
- Chakanika, W. W., Sichula, N. K., & Luchembe, M. (Eds.). (2016). *University Extension Education in Zambia: A reader*. Lusaka: UNZA Press.
- Gillard, P. (2005). Oxford Advanced Learners Dictionary. Cambridge University Press.
- Hakala, D. (2008). The pros and cons of Providing Employee Education. The Employers'& Labour Bureau.
- Jones, E. (1994). *Transitions and Directions in Extension*. Toronto: Thompson Educational Publishing.
- Kombo, D. K. and Trom, L. A. (2006). *An Introduction to Proposal and Thesis Writing*. Nairobi: Paulines Publication Africa.
- Kumar, R. (2014). *Research method: A step-by-step guide for beginners* (4 ed.). New Delhi: SAGE Publications Limited.
- Luchembe, M. (2010). The Roles and Challenges of Extension Education at the University of Zambia. Paper presented to Masters Students in Livingstone.
- Lin, D. (2009). Role of University Extension Education in a Learning Society: *The Journal of Human Resource and Adult Learning*. No. 1, 95-103.
- Mandumbwa, F. (2011). Challenges faced by the University of Zambia Resident Lecturer in the Provision of University Extension Programmes and their Solution. Lusaka: University of Zambia.
- Moore, D.S. and MC Cabee, G.P. (1989). *Introduction to the Practice of Statistics*. New York: Freeman and Company.

- Mulenga, A. (2019). Towards upgrading university extension education programmes from Diploma to degree level: stakeholder's views and instructional mode of learning in Lusaka district. Lusaka: University of Zambia.
- Mannheim, K. (1958). Adult Education. London: Routledge and Kegan Paul limited.
- Nduna, M. (2010). Challenges Encountered by the University of Zambia in the Implementation of University Extension Education. A Case Study of Northern Province. Lusaka: University of Zambia.
- Ngoma, F. (2009). A Review of Factors which Influence Learner Participation in University Extension Education in Chipata District. Lusaka: university of Zambia.
- Ngoitiana, Z.N. (1991). Training for Rural Extension Workers in Tanzania: Problems and prospects. *Adult Education and Development*. No 36, 35-46.
- Richardson, G.J., Moore, T. (2000). *Determining extension program economic benefit and value*. Raleigh, NC: NC State University.
- Shenfield, A. and Shannon, J. (1965). *University Extension*. New York: Centre for Applied Research in Education.
- Sichula, K. N., Luchembe, M., & Chakanika, W. W. (2016). Education for sustainable development: Integrating indigenous knowledge in water and sanitation programmes in Shimukuni community of Chibombo district in Zambia. *International Journal of Contemporary Applied Sciences*, 3(1).
- Sichula, N. (2018). *Pedagogical practices in non-formal adult literacy classes*. University of Pretoria, Pretoria.
- Sichula, N. K. (2016). University extension education: historical perspectives, trends and the future. In W. W. Chakanika, N. K. Sichula, & M. Luchembe (Eds.), *University Extension Education in Zambia: A reader*. Lusaka: UNZA Press.
- Stone, R. J. (2008). *Human Resource Management*. Milton Old: John Wisely and So Australian Ltd.