

## **The Relevance and Adequacy of University Education to Occupational Demands: the case of Zambia.**

### **1. Introduction**

The University of Zambia was established in 1966 by an Act of Parliament specifically to provide an education related to the economic, political, social and cultural conditions of Zambia and which would reflect the wishes and aspirations of Zambians. The CBU was later opened in 1987 with the primary aim of providing skilled manpower in answer to the national requirements. The universities operate within a general government policy framework anchored on two cardinal principles, namely that the universities must be responsive to the real needs of Zambia and that they must, on the basis of merit, win the respect and proper recognition of the university world.<sup>1</sup>

The idea behind the two national institutions then was to develop a cadre of educated and skilled technocrats that would bring about increased productivity and ultimately increased revenue and wealth for the nation. This was essentially the Human Capital Theory approach to development whose proponent George H. Schultz argued that investment in human resources was key for economic development (Harbison and Myres 1964). Decades later the need for skilled human resources has not been met as recorded by (Kanyengo 2009).

The lack of trained human resources in the country exerted a lot of pressure on the University of Zambia to increase the pool of qualified people from which the nation could draw on. The 1990s liberalization of education put more emphasis on student enrolment numbers without a corresponding increase in student support systems. Moreover, the introduction of these new programmes did not correspond with planning for the supporting infrastructure that would be needed to nurture enquiry-based learning among the students.

To achieve the dream of providing highly skilled personnel for the nation the two universities offer various programmes. The University of Zambia offers courses through the following schools: Education, Humanities and Social Sciences, Law, Medicine, Veterinary Medicine, Agricultural Engineering, Mines, Engineering and Natural Sciences while the Copperbelt University has the following schools: Business studies, Engineering, Mines and Mineral Sciences, Built environment, Natural resources, and Mathematics and Natural Sciences.

To help meet the manpower requirements of the country, the University of Zambia and the Copperbelt University combine practical service and research in order to

remain the seats of learning that would provide quality training as part of the development strategy of the nation. The necessity of training institutions to periodically review their programmes and performance to ensure that they continue to meet the needs, challenges and developments brought about by an ever-evolving society cannot be overemphasised (MOE 1996, vii).

However, the preoccupation with quantity was feared to be injurious to quality which was and remains highly desirable if the human resources produced were and are to be responsive to the development needs of the country. Since the role of the two universities in national development has not met the envisaged levels of contribution, ways and means have to be found to ensure the universities realise their original vision. In Zambia there has been widespread public and employer disquiet about the relevance and adequacy of university education and the job performance of university graduates. This study explored the perceptions of university graduates and employers of the relevance and adequacy of university education to the job demands of formal employment. This study is an attempt to provide part of the solution to the problems of relating education and training to the development needs of the country and thereby ensure the realisation of the original vision of the two universities.

The connection between university training and level of job performance has never been established with any certainty. In an attempt to do this I sought to examine the nature of training being offered by the two universities and whether there was difference between the job performance of university graduates and that of college graduates with similar job descriptions. Furthermore, I sought to explore factors other than the nature and level of training received by both university and college graduates which affect job performance.

## **2. Methodology**

For this study the descriptive survey design approach was chosen as the method of research, considering that this was largely a descriptive qualitative study and this type of design is suitable as it allows for the description of such issues as values, attitudes, beliefs and characteristics. (Chifwepa 2006, 59) explains that a survey 'explores, evaluates and attempts to analyse, interpret and report on the facts and situations as well as opinions of people towards an issue'. A combination of quantitative and qualitative techniques were used to collect the data.

The target population for this study were university graduates from the University of Zambia and the Copperbelt University who were working with various organizations and institutions and Human Resource Managers in the institutions where the graduates were working. The sample comprised fourteen institutions. The sample was made up of thirty-two graduates from the Schools of Education, Engineering and Humanities and Social Sciences of the University of Zambia and the Schools of Business Studies and Built Environment of the Copperbelt University and twenty-nine Human Resources Managers of the institutions that had employed these graduates. Out of these 18(56%) of the graduates and 17(59%) of the Human Resource Managers responded representing a combined return rate of 57%. Simple random sampling was used to select the respondents.

Primary data were collected from both sets of respondents through self-completion questionnaires. In addition in-depth personal interviews were conducted with the Human Resource Managers in order to obtain more detailed information about the perceptions of university graduates and employers regarding the performance of graduates in the work place in view of the training received at university. Secondary data was collected from relevant documents pertaining to training and human resource matters. Data analysis consisted of content analysis of the interview responses and item analysis of the questionnaire responses. These responses from the data were then coded and tabulated and interpretation analysis used, inter alia, to establish themes and sub-themes emerging from the data. This produced frequencies, group means, and percentages.

### **3. The findings of the study**

This study set out to investigate the relevance and adequacy of university education in Zambia in meeting occupational demands. Its objectives were to examine the nature of training being offered by two of the three public universities, namely, the University of Zambia (UNZA) and the Copperbelt University (CBU), to compare the performance of university graduates to that of college graduates with similar job descriptions and to identify factors other than training which affected the job performance of university graduates.

Primary data for this research were gathered from 18 university graduates, (Male=15, Female =3) and 17 human resource managers, (Male=11, Female=6) in semi-

autonomous statutory government institutions. The age distribution of the university graduates ranged from below 25 to above 45 years. Sixteen of them (89%) had attended UNZA while the remaining two (11%) had attended CBU. With the exception of one respondent who had training from another tertiary institution before acquiring university education, all the graduate respondents only had initial university training. Nine (50%) had been working with their current employers for less than one year, three (17%) between one and three years, four (22%) between three and five years and two (11%) for over five years. Sixteen (89%) had never worked in a similar job description before they entered the university while two (11%) had done so. Four (22%) of them had prior fieldwork attachment with their current employers which was not the case with the remaining fourteen (78%).

Because of their tenure and relatively secure position within their organisations, and because they were responsible for hiring employees, the human resource managers were willing to openly discuss various aspects of the performance of their employees. They are also key in appraising employee performance and recommend pre-employment and in-service training where need arises.

When asked about the relevance of the university training received to their work, thirteen (72%) of the university graduates indicated that it was very relevant, four (22%) indicated that it was fairly relevant and one (6%) that it was not relevant at all. With the exception of one the respondents further indicated that the university education had been necessary for getting their present jobs.

All the graduate respondents indicated that they felt the university education had adequately equipped them for the demands of their work. As regards the duration taken to stabilise and adapt to the occupational demands of their respective jobs, the period ranged from three months to twenty-four months. Three (17%) of the respondents underwent pre-employment training offered by their prospective employer and twelve (67%) had undergone in-service training. Of those who had undergone either pre-employment or in-service training two (11%) felt it was not different from the university training they had received, three (17%) felt it was very similar while six (33%) felt it was significantly different.

Thirteen (76%) of the respondents indicated that they had employed college graduates with similar job descriptions as university graduates while three (18%)

indicated that they did not have college graduates with similar job descriptions as university graduates.

With regard to supervision of new graduates six (35%) felt graduates need ordinary supervision, three (35%) felt they need minimum supervision while one indicated that level of supervision depends on the ability of the individual graduate.

Human resource managers were asked how long university graduates took to stabilise in their work, twelve (70.5%) of them reported that university graduates took less than six months to twelve months while three (18%) indicated that graduates took twenty-four months and above to stabilise in their work. This was on account of the fact that university graduates took long to stabilise in their work. Because of these adaptability problems, most organisations found it necessary to retrain university graduates. Eleven (65%) indicated they found it necessary while three (18%) indicated they did not find it necessary because the graduates were well equipped to do their work. Nine (53%) of the respondents said they found it necessary to retrain university graduates in order to bring about specialisation.

When compared to college graduates in work places, the university graduates pointed to better content knowledge, higher technical analysis and reasoning and better adaptability on the one hand and higher salary and better conditions of service on the other. This was in agreement with the views of the human resource managers of which six (35%) perceived that university graduates had higher theoretical knowledge, six (35%) that university graduate employees had higher technical analysis and reasoning and adaptability compared to college graduate colleagues. Two (12%) of the eleven human resource managers who indicated that they found it necessary to retrain university graduates still believed that university graduates fared better in their work than college graduates with similar job descriptions. Three (18%) believed that college graduates fared better while seven (41%) were of the view that there was no significant difference in performance between the two.

Seven of the graduate respondents admitted exhibiting weaknesses in certain areas of their work compared to their college graduate workmates who had similar job descriptions. These weaknesses were mainly attributed to the theoretical nature of university education which provided few avenues for practical or hands on experience, inadequate training facilities (materials and equipment) at students' disposal and an insufficient fieldwork attachment period during training. These weaknesses surfaced both

in the probation and post-probation periods of their work. Others were said to have problems of adaptability while two (12%) reported that university graduates did not suffer any disadvantage when compared to their non-university graduate workmates. Seven (41%) of the employers also believed that university graduates were segregated against particularly in schools, while others were said to have little or no commitment.

The majority (11 or 65%) of the graduate respondents indicated that there were no differences in adaptability and performance attributable to gender although women were seen to be generally more stable in handling work and non-work related matters than men.

In addition to the above factors, regarding their job performance, which invariably could be said to be affecting respondents' perception of the relevance and adequacy of university education, numerous factors other than training were reported to be affecting performance. Prominent amongst these were salary and conditions of service. According to the human resource managers, university graduates had incentives exclusively available to university graduates. Top on this list were promotional prospects loan facilities, personal to holder vehicles and medical, education and holiday allowances.

Twelve (67%) indicated that the salary and conditions of service affects their performance positively, five (28%) said negatively while one (5%) indicated these had no effect at all. As to whether the relationship between the respondents and their employers does have a negative effect on the former's performance four (22%) answered in the affirmative while fourteen (78%) said such a relationship did not have a negative effect on their performance.

#### **4. Discussion**

The study found that both university graduates and their employers were of the view that university education in Zambia was relevant to occupational demands but that it was rather inadequate to meet occupational demands of industry as it was too theoretical and therefore did not provide sufficient hands-on-practical experience during training. This was caused by a lopsided tilt towards theory during training at the expense of practical training and practical exposure, an ingredient key to making the current training regime meet the needs of the graduates and the expectations of employers. At the centre of this debate as evidenced by literature on the sociology of professions is the belief that

university graduates generally take up white collar jobs while those trained in vocational institutions are the ones that need practical training since they take up most of the manual jobs (Pavlin, Svetlik and Evetts 2010). The superiority theory of university training is anchored in the fact that universities worldwide tend to offer training requiring high level understanding and analysis while vocational training is deemed less mentally strenuous but places more emphasis on practical work.

This inadequacy in training caused problems of adaptability for university graduates in the work place and compelled the majority (65%) of the employers to retrain the graduates in order to ensure specialisation and to bring their skills level to that level required by industry and ensure easy adaptation to the occupational demands.

It appears probable that the long period graduates took to stabilise in their jobs was as a result of the lack of job related specific specialisation during their training. Part of the reason for this inadequacy lay in the fact that in some cases the training offered was too generalised. This was confirmed by the university trainers of engineers who admitted that they consider the wider labour market when training their students and avoided offering specialised training. For example one could be trained in mechanical engineering generally and not specifically in design engineering or manufacturing engineering. This then compels employers to beef up initial university training with pre-employment and in-service training.

For several decades human capital and labour theorists have engaged in unending debate on whether universities should provide general or occupation-specific competencies. Part of the problem as argued by (Pavlin, Svetlik and Evetts 2010, 95):

lies in the very different roles that are played by certain types of educational institutions. Their curricula can be oriented more towards the production needs of employers (Schultz, 1961) or career development of individuals (Semeijn et al., 2005); they can serve as a screening or certification mechanism for different actors, such as professional groups or a state (Collins, 1979; Spence, 1973), or several roles at once... Increasingly, however, the preparation of students for the world of work provides the core legitimacy for the existence of educational institutions, regardless of the occupational domain they belong to.

The finding regarding the difficulties university graduates encounter as they attempt to carry out their work satisfactorily, that is, the mismatch between the theoretical nature of university training and the nature of occupational work dominates public discussion of and attitude towards university graduates and is consistent with the findings of (Manchishi and Masaiti 2010) who found that graduate teachers from the University of Zambia struggled to teach in schools because of the enormous mismatch between content

learned at UNZA and the demands of the jobs. Further the study revealed that most institutions required newly employed graduates to undergo a probation period of between six and twelve months during which time, the graduates were closely supervised. Even with this period of probation, employers felt that university graduates needed as much as two years to stabilise in their jobs, hence the need for close supervision.

Significant to this analysis is the fact that the findings are similar across academic disciplines, thereby giving credence to the widely held assertion that the problem is institutional and reflects policy orientations of universities. In this article I have argued that there is a link between the nature and level of practical occupational knowledge obtained at the point of training to the levels of job performance.

However, on the positive side data generated in this study further supports the widely held public perception that university graduates have superior theoretical knowledge and possessed higher reasoning skills compared to college graduates. This view agrees with wide perceptions of the public on this matter and seems to contradict and challenge the superiority theory referred to above of university education in terms of theoretical know-how. The argument is that the perceived deficiency of the college graduates in terms of theoretical underpinnings of their disciplines is adequately compensated for by their lengthy and superior practical-oriented training. Inversely, stated, the superior theoretical knowledge of the university graduates is undone by their inferior practical orientation. Unsurprisingly, seven respondents were of the view that there is no significant difference in performance between university graduates and non university graduates. Significantly three of the employers believed that college graduates performed better in their jobs This is inspite of the higher theoretical knowledge, higher technical analysis and reasoning and adaptability that university graduates were perceived to have compared to college graduate colleagues.

Further, the results show that work related incentives did not seem to have any significant impact on the job performance of both university and college graduates. While graduate employees reported that salaries and conditions of service enhanced their performance, employers categorically stated otherwise. College graduates as discussed earlier were at times seen to outperform university graduates who not only had superior theoretical knowledge but who had higher salaries and better working conditions than college graduates. This clearly indicates that the lack of practical orientation of university graduates outweighed any motivational factors management had put in place

for the university graduates and challenges the overemphasis placed on employee motivation to enhance job performance. It further indicates that graduates took it for granted that their higher educational backgrounds which were supported by higher salaries and better conditions of service would guarantee them successful and better job performance than college graduates. If the employers' responses are anything to go by, this interpretation of matters is grossly misleading.

In a country where females are still generally looked down upon as being inferior to their male counterparts, it was significant that both sets of respondents did not believe gender had any effect on the performance of graduate employees. This was significant considering that there is a general perception that most women, particularly in the sciences, perform far below their male counterparts.

But while this issue is topical there is limited knowledge in Zambia of how higher educational institutions and practitioners are interacting in an attempt to resolve this age-old anomaly.

## **5. Conclusion and Recommendations**

The main objective of this article was to examine the relevance of university training to occupational demands. Although the debate about the relevance and adequacy of university training in meeting occupational demands is an old one, it is through reporting the views of the graduates themselves that this study makes a distinctive contribution to the discourse on relevance of university training. The article has shown that the training offered by the two universities was relevant to meeting occupational demands. Then the article examined the adequacy of the training to meet the occupational demands of employment. However, this paper argues that university graduates could be better prepared for the world of work if a greater amount of time was spent on practical related aspects of training. And this is generally true irrespective of the field under discussion.

Perhaps achieving a balance between theory and practical work is one of the most important tasks for university educators in Zambia in the coming years. One way to achieve this is to lengthen the periods of industrial attachment for students and by so doing compensate for the insufficient practical training and help redress the imbalance in the skills profile of the graduates. This requires that university educators institute a workable mechanism that would promote a direct and regular exchange of ideas between

the universities and industry and ensure the mismatch between theory and practice is redressed. This demands that relevant equipment for practical work must be made available for training purposes. Participatory learning through discussions, written work and sharing of real life experiences especially with those from industry could help improve university training and consequently graduate job performance in work places. This need is well recognized by the Ministry of Education as follows:

The relevance of training and programmes would be ensured by extensive interaction between the higher institutions and various sectors of the economy. Some direct involvement in the institutions' activities by bodies such as the Employers Federation, the Manufacturers Association, or the Association of Commerce and Industry, as well as by relevant government ministries and other organizations, would help to ensure that the programmes offered by institutions were what industry, commerce and society required. Currently there is very little participation by employers in the development of curricula for higher level institutions. Moreover, except in the case of institutions established by companies to serve their own needs, very few employers contribute towards the cost of educating their future employees. These issues have clear implications for higher education policies.<sup>2</sup>

The above quote agrees with the views of (Pavlin, Svetlik and Evetts 2010, 109) who have argued that “higher education institutions are not sympathetic to new demands from the world of work and are reluctant to support these competencies in their curricula.”

The article has further shown that there is no significant difference in performance between university trained graduates and college trained graduates. Although this is a subject of much topical debate, the empirical evidence adduced in this article has been missing in public discourses on the matter.

As a final reflection, the findings of this study may be of relevance to the future development of a number of upcoming universities. This article suggests that beyond mere exchange of ideas, it seems imperative that industry should play a role in influencing university curricular so that it reflects the needs of industry. This entails improving the coordination between the universities and industry. It might also require the universities to monitor the performance of their graduates in industry so as to establish any training related deficiencies and take remedial action.

## Endnotes

1. Ministry of Education. Relevance of Higher Education Programmes. Accessed on 02/10/2010 From [http://www.moe.gov.zm/index.php?option=com\\_content&task=view&id=85&Itemid=145](http://www.moe.gov.zm/index.php?option=com_content&task=view&id=85&Itemid=145)
2. Ministry of Education. Relevance of Higher Education Programmes. Accessed on 02/10/2010 From [http://www.moe.gov.zm/index.php?option=com\\_content&task=view&id=85&Itemid=145](http://www.moe.gov.zm/index.php?option=com_content&task=view&id=85&Itemid=145)

## References

- Chifwepa, V. (2006). 'Development of a Model Plan for the application of Information Communication Technologies in Distance Education at the University of Zambia.' PhD Thesis, University of Zambia. Lusaka
- Harbison, F and Myres, C.A. (1964). *Education, Manpower, and Economic Growth*. McGraw-Hill Book Company
- Kanyengo C.W (2009). 'A Library response to the Massification of Higher Education: The Case of the University of Zambia Library.' *Higher Education Policy*. 22, 373–387.
- Manchishi, C.P and Masaiti, G. (2010). 'The University of Zambia Pre-Service Teacher Education Programme; Is it Responsive to Schools and Communities Aspirations?' Unpublished research report. Lusaka.
- Ministry of Education. Relevance of Higher Education Programmes. Accessed on 02/10/2010 From [http://www.moe.gov.zm/index.php?option=com\\_content&task=view&id=85&Itemid=145](http://www.moe.gov.zm/index.php?option=com_content&task=view&id=85&Itemid=145)
- Ministry of Education (1996). *Educating Our Future; National Policy on Education*. Lusaka: Government Printer
- Pavlin, S., Svetlik, I and Evetts, J. (2010). Revisiting the Role of Formal and Practical Knowledge from a Sociology of the Professions Perspective; The Case of Slovenia. *Current Sociology*. 58(1): 94-118