

**UNPACKING THE STATE OF HUMAN CAPITAL IN AFRICAN UNIVERSITIES –
THE CASE OF ZIMBABWE****Ushe Makambe**

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ABSTRACT: *This paper sought to establish the state of Human capital (HC) in selected public universities in Zimbabwe in terms of prevalence of senior academics such as associate professors and professors as well as the impact on the academic and economic development of the universities and the country at large. A good number of key literary sources were consulted on which the theoretical underpinnings of the paper were grounded. A sample of five state universities was chosen. Convenient sampling was adopted whereby the universities were chosen on the basis of availability of quality and completeness of data on the university website. Data was collected on the qualifications and grade of faculty deans and department chairpersons, and lecturing staff from the universities' websites. All in all, the study covered a total of 18 faculties and 77 departments. The results of the study showed that there was a serious absence of senior academics in selected universities compared to their counterparts in the region and that this was having a negative impact on the quality of the universities' academic and economic activities.*

KEYWORDS: Human Capital, University, Professor, Senior Academics, Research

INTRODUCTION

Although senior academic staff recruitment and retention remain a challenge throughout the world, the situation in many African countries appears to be particularly urgent. Shortages of senior academics (the professoriate) in African universities has a devastating impact on the goals of universities and if something is not done very soon, there is a real danger that the African universities will not only lose their ability to produce adequate personnel to support Africa's human resource needs but also to uphold and protect the quality of intellectual life in the Africa region (Tettey, 2010). Postgraduate students constitute the pool from which the next generation of academics will be drawn. Unfortunately, due to a dearth in senior academics who are responsible for the development of academics, the number of master's and doctoral enrolments remains relatively small, with declining trends in some countries (Metcalf, Heather, Philip, and Martin, 2005; Hugo, 2005).

Tettey (2010) argues that the quality of any higher education system is determined less by the number of people teaching in it than by the qualifications of its academic staff. One significant measure of the capability of the professoriate to provide quality research and instruction is doctoral-level certification. A study carried out by Tettey (2010) revealed that most African universities had relatively fewer doctoral than master's degree holders on their teaching staff. For example, only 19% of staff at the University of Education, Winneba, had doctorate degrees in 2008, while doctoral degree holders constituted only 31% of the total staff complement at the University of Kwazulu-Natal (KZN) in 2006. Three South African universities were exceptions to this pattern. For instance, Rhodes University had 49% of staff in possession of doctorates in 2005, while University of Cape

Town had 59% in 2006. University of the Witwatersrand had 53% in 2007. In addition, two Nigerian universities - Bayero and Ibadan - had over half of their academic staff with doctorates at 51 and 63% respectively.

Due to decreasing government funding of universities worldwide, there has been a transformation of universities from teaching and research institutions to entrepreneurial universities by adding the pursuit of economic outcomes of research or service for society as an extension of the social and economic development mission of universities (Dzisah and Etzkowitz, 2007). Dzisah and Etzkowitz (2007) add that this phenomenon has led to the development of the concept of 'Professors of Practice' (PoP) as a strategy to enhance academic

entrepreneurship and innovation-based regional development. For American universities such as MIT, the concept is reserved for distinguished practitioners who have had a world class impact on fields important to their academic programmes, and to those committed to enhancing those programmes. The implication is that universities lacking in professors will face serious challenges in enhancing academic entrepreneurship hence economic prosperity of universities and their countries.

LITERATURE REVIEW

This section outlines the views of scholars on the meaning of human capital (HC) in reference to professors and its impact on the academic and economic development of universities. It also outlines the role of professors in universities.

The meaning of human capital

According to Goldin (2014), HC is defined as the skills possessed by a labour force and these skills are considered a resource or asset to the organisation employing that labour force. It encompasses the notion that there is investment in people, for example, education, training, and health and that such investment increases the productivity of an individual employee. In practice, HC is measured as an index of efficiency of units of labor and this efficiency is enhanced by higher levels of education and training, resulting in an increase in economic growth and quality of life (Clark, 2009). Adams (2002) believes that HC affects the structure of the national production and the technological level. As a result, economies endowed with more educated people are able to improve local technologies since the use of new technologies requires a high quality labourforce. A common feature of African economies is low productivity in all sectors on account of poor labour quality resulting in the lack of structural economic transformation. This is the reason why universities require the services of well-educated and experienced senior academics such as professors in order to be more effective and efficient in dispensing their mandate of teaching, research, and community service leading to the production of high quality HC.

The importance of senior academics in universities

Macfarlane (2011) argues that professors (senior academics) represent a group of individuals at the apex of their discipline or profession. They have considerable expertise across many elements of academic practice, including research, teaching and service activities incorporating leadership and management roles. The professoriate undertake a range of leadership and professional support activities connected with research and teaching practice, mentoring,

influencing the work and direction of the university, representing the university in interfacing with wider communities and helping staff to develop. Much of this work might be classified as 'academic citizenship' in aiding the development of other less experienced colleagues (Macfarlane, 2007; Tight 2002).

Macfarlane (2011) lists the roles of professors as follows:

- Helping other colleagues to develop
- Leadership in research
- Being role models
- Upholding standards of scholarship
- Influencing work and direction of university
- Influencing public debate on national issues
- Representing the department at university and national levels
- Leadership in teaching
- Income generation

Another list of roles of professors in a university had the following elements (Macfarlane, 2011):

- Critic: of ideas, concepts, theories, paradigms, etc
- Advocate: of new or alternative ideas, concepts, theories, paradigms, etc
- Mentor: to less experienced colleagues within and without the institution
- Guardian: of standards of scholarship and academic values within the discipline or profession
- Enabler: of access to networks and opportunities for less experienced colleagues
- Ambassador: on behalf of the university in external relations both nationally and internationally

Absence of professors in a university means absence of the above stated critical roles which diminishes the importance of the particular university and the reason for its existence.

All in all, a professor is an intellectual leader who shoulders the following academic responsibilities for his/her university of which the absence of the professor at a university means there is no university worth talking about (Macfarlane, 2012):

- Knowledge producer: work within established scholarly and professional societies, research groups and departments to deepen and extend the knowledge base
- Academic citizen: apply their disciplinary or professional specialism for the benefit of wider public understanding
- Boundary transgressor: challenge the norms of established disciplines and develop connections across fields of enquiry
- Public intellectual: engage with and seek to influence public debate on social, moral and economic issues beyond the confines of their academic specialism

In further support for the critical role of professors in universities, Dube and Ngulube (2013) aver that it is undeniable that senior academics fit into the category of golden workers (renowned scholars and rated researchers). This is because they bear the responsibility that entails increasing the research output by not only supervising postgraduate students but also publishing in accredited journals. Supervision and publishing are both critical elements that determine the ranking of the institution as well as its standing and visibility in the national and international academic milieu. This view is supported by Selesho and Naile (2014) who opine that the eminence of a university cannot surpass that of its academic staff, and that the essence of any institution is in its ability to attract and retain first-class academics.

In 2000, the then UN Secretary-General Kofi Annan made the following speech about the university in Africa (United Nations Information Service, 2000):

“The university must become a primary tool for Africa’s development in the new century. Universities can help develop African expertise; they can enhance the analysis of African problems; strengthen domestic institutions; serve as a model environment for the practice of good governance, conflict resolution and respect for human rights, and enable African academics to play an active part in the global community of scholars”.

It is a university that is endowed with senior academics (Associate Professors and Professors) - not junior academics - that can effectively develop expertise in their fields of specialisation, that can assist in appropriately analysing African problems with small margins of error, that can influence politicians to adopt good governance practices and respect for human rights through lobbying, advocacy, advice, and criticism, and can assist in conflict resolution.

According to DE Bloom, Hartley, and Rosovsky (2006) and UNESCO Institute for Statistics (2005), the output of academic research in Sub-Saharan Africa remains weak compared to other regions of the world. They aver that in 1995 for example, the region was responsible for just 5,839 published academic papers compared to South Asia which produced 15,995 published papers, while Latin America and the Caribbean provided 14,426. Only the Middle East and North Africa produced fewer papers than Sub-Saharan Africa, yet the former’s total had doubled since 1981, while Sub-Saharan Africa’s had risen by one third. As such, universities in Sub-Saharan Africa need to populate their faculties and departments with large numbers of senior academics such as associate professors and professors if they are to catch up with the rest of the world in terms of research output and its quality.

The professor at the University of Western Australia

University of Western Australia (2015) outlines the role of the professor as follows:

“Professors (Level E) provide academic leadership to the University, primarily through demonstrating and fostering excellence in research, teaching, professional activities and policy development at a variety of levels – within the academic discipline, within the academic unit, within the institution and within the wider community. Professorial leadership is linked to a record of scholarly and professional achievement in the relevant discipline. Professors are usually recognised at an international level as leading authorities in their field. In most circumstances professorial leadership extends to community affairs, particularly

those related to the discipline, and in professional, commercial and industrial sectors where appropriate”.

This role statement leads to the following expectations of a Professor (Level E) from the perspective of the University of Western Australia (University of Western Australia, 2015):

Research

Professors (Level E) are crucial to the research effort of the University. They are expected to provide guidance and assistance to more junior staff in developing their capacity for teaching and research. Many professors will secure substantial grants which cover teams including junior staff. In many disciplines, provision of an environment for honours and post-graduate students is dependent upon the ability of the professor to attract external funds. Professors are expected to foster the research of other groups and individuals within the School, in the discipline and in related disciplines. They should introduce research students and colleagues to useful networks inside and outside the University.

Teaching

Teaching is central to the role of all academic staff. It is expected that a professor will seek continuing improvement in academic standards rather than merely maintaining them, and will make a distinguished contribution to teaching in the faculty and University. A professor should be expected to provide leadership in curriculum development, design of courses, and innovations in the delivery of teaching in the discipline.

Service

Professors should be role models in their relationships with students and with general staff at all levels. They should be accessible in the School and should take part in the community life of the University, including ceremonies where degrees are awarded to students of the school and to persons honoured by the University. Professors are expected to participate in the appropriate national and international organisations of their discipline or profession. In most fields, such international involvement and standing should be clearly evident. It is expected that a professor will serve on expert committees, be willing to participate in reviews and to work at a national and international level. Professors have a responsibility to advance the image of the University in the community locally, nationally and internationally. That image will be enhanced by excellent research and good teaching, as well as the receipt of awards and participation in major conferences. Professors should be willing to contribute to policy formulation and management of their school, their faculty and the University (through the Academic Board) where they have a contribution to make. They should also play a constructive role in appointment, confirmation and promotion processes for academic staff.

METHODOLOGY

The original objective of this study was to cover all state universities in Zimbabwe and all faculties to determine the state of their HC in terms of distribution of their academic qualifications and grade such as qualifications for Deans, Department Chairpersons, Professors, doctoral holders, and non-doctoral holders. Due to time limitations, a sample of five out of the eight state universities was chosen. Convenient sampling was adopted whereby

the universities were chosen on the basis of availability of quality and completeness of data on the university website. Based on this criterion, the University of Zimbabwe (UZ), National University of Science and Technology (NUST), Great Zimbabwe University (GZU), and Bindura University of Science Education (BUSE) were selected for this study.

Data was collected on the qualifications and grade of faculty deans and department chairpersons, and how many of the members of academic staff were professors, doctoral holders, and non-doctoral holders. This data was gathered from five faculties (out of ten) and twenty-seven departments (out of thirty) of the UZ, five faculties (out of six) and twenty-three departments (out of twenty-six) of NUST, four faculties (out of seven) and fourteen departments of GZU, and four faculties (out of five) and thirteen departments of BUSE. All in all, the study covered a total of 18 faculties and 77 departments. Results were presented in a tabular format as shown in Table 1-4. Some data was also collected on the state of HC with regards to faculty and departmental leadership as well as existence of senior academics in some universities in South Africa and

Botswana for purposes of comparison. Statistics were obtained on the qualifications of some deans and chairpersons and professors at the University of the North West's faculties of Agriculture, Science, and Technology, and Commerce and Administration, University of South Africa (UNISA)'s College of Human Sciences, as well as University of Botswana's Department of Economics.

RESULTS

Results of the study are presented in Tables 1, 2, 3, and 4.

Table 1: Academic staff at the University of Zimbabwe (UZ)

Faculty /Department	Grade / Qualification of dean	Grade/Qualification of Chairperson	Professors	PhD holders	Non-PhD	Total
EDUCATION	Dr					
Adult Education		Dr	0	0	2	2
Curriculum and Arts Education		Dr	3	2	6	11
Educational Foundations		Dr	0	3	4	7
Science and Mathematics Education		Dr	1	1	6	8
Educational Administration		Masters	0	2	2	4
Teacher Education		Dr	1	0	9	10
Technical Education		Masters	0	0	9	9
Human Resources Research Centre		Professor	0	0	2	2
ENGINEERING	Dr					
Civil Engineering		Dr	2	4	0	6

Metallurgical Engineering		Masters	0	0	0	0
Electrical Engineering		Masters	0	1	5	6
Mining Engineering		Masters	0	0	2	2
Geoinformatics and Surveying		Masters	0	0	4	4
Mechanical Engineering		Masters	0	1	7	8

AGRICULTURE	Dr					
Economics and extension		Dr	0	2	4	6
Animal Science		Dr	0	2	6	8
Crop Science		Dr	0	4	4	8
Soil Science and Agricultural Engineering		Professor	2	6	5	13
ARTS	Professor					
Economic History		Dr	0	3	7	10
English		Masters	0	5	9	14
History		Dr	1	7	4	12
Modern Languages		Masters	0	0	10	10
COMMERCE	Dr					
Accountancy		Masters	0	1	5	6
Business Studies		Masters	0	4	3	7
Tourism, Leisure, and Hospitality		Masters	0	0	6	6
Graduate School of Management		Dr	0	1	2	3

Source: University of Zimbabwe (2015)

Table 2: Academic staff at National University of Science and Technology (NUST)

Faculty /Department	Grade/Qualification of dean	Grade/Qualification of Chairperson	Professors	PhD holders	Non-PhD	Total
CULTURE & HERIATAGE STUDIES	Dr					
Archaeology and Museum Studies		Masters	0	0	3	3
Heritage Studies		Masters	0	0	4	4
COMMERCE	Dr					
Accounting & Information Systems		Masters	0	1	17	18
Banking & Finance		Masters	0	0	14	14
Economics		Masters	0	0	10	10
EDUCATION	Dr					
Adult & Continuing Education		Masters		0	3	3
Curriculum Studies		Masters	0	2	43	45
Educational Foundations		Masters	0	1	16	16
Special Needs Education		Masters	1	5	4	10
Teacher Development		Masters	0	1	19	20
SOCIAL SCIENCES	Masters					
Sociology & Social Anthropology		Dr	0	0	11	11
Psychology		Masters	1	0	8	8
Rural & Urban Development		Masters	0	0	8	8
Human Resources Management		Masters	0	0	8	8

X	Grade/Qualification of dean	Grade/Qualification of Chairperson	Professors	PhD holders	Non-PhD	Total
COMMUNICATION AND INFORMATION SCIENCE	Dr					
Library & Information Science		Masters	0	2	13	15
Journalism & Media Studies		Masters	0	0	11	11
Records & Archives Management		Masters	0	0	10	10
INDUSTRIAL TECHNOLOGY	Masters					
Chemical Engineering		Masters	0	0	9	9
Electronic Engineering		Masters	0	0	6	6
Civil & Water Engineering		Masters	0	0	6	6
Textile Technology		Dr	0	0	6	6
Industrial & Manufacturing Engineering		Dr	0	0	10	10

Source: National University of Science and Technology (2015)

Table 3: Academic staff at Great Zimbabwe University (GZU)

Faculty /Department	Grade/Qualification of dean	Grade/Qualification of Chairperson	Professors	PhD holders	Non-PhD	Total
APPLIED SCIENCES	Dr					
Applied Biology and Biochemistry		Masters	2	1	3	6
Applied Chemistry		Dr	0	0	4	4
Applied Mathematics		Masters	0	1	21	22
Applied Physics		Masters	0	0	7	7
Computer Science		Masters	0	1	6	7
Environmental Science and Health		Masters	0	0	3	3
Forest Resources & Wild Life Management		Masters	1	0	4	4
Sports Science and Coaching		Masters	0	0	7	7
COMMERCE	Masters					

Management/Marketing		Masters	0	0	21	21
Risk Management & Insurance		Masters	0	0	7	7
Banking		Masters	0	0	12	12
Finance		Masters	0	1	13	14

Source: Great Zimbabwe University (2015)

Table 4: Academic staff at Bindura University of Science Education (BUSE)

Faculty /Department	Grade/Qualification of dean	Grade/Qualification of Chairperson	Professors	PhD holders	Non-PhD	Total
SOCIAL SCIENCES & HUMANITIES	Professor					
Social Work		Dr	0	1	5	6
Peace & Governance		Masters	0	1	9	10
SCIENCE EDUCATION	Dr					
Educational Foundations		Masters	0	0	3	3
Curriculum Studies		Masters	0	1	3	4
Science & Maths Education		Masters	0	0	3	3
SCIENCE	Dr					
Biological Sciences		Dr	1	0	8	9
Chemistry		Dr	0	3	6	9
Geography		Dr	0	3	11	14
Physics & Maths		Masters	1	1	13	15
SOCIAL SCIENCES	Professor					
Accountancy		Masters	0	0	7	7
Economics		Masters	0	1	12	13
Marketing		Masters	0	0	8	8
Human Resources Management		Masters	0	0	3	3

Source: Bindura University of Science and Technology (2015)

Table 1 shows that of the five faculties of the UZ covered in this study, only one is headed by a professor as Dean with the other four being PhD holders. Out of the 26 department chairpersons, only two were professors, 12 were PhD holders, while 12 were masters' degree holders. In terms of the lecturing staff, the Faculty of Agriculture had only two professors, 14 PhD holders, and 19 masters' degree holders in the four departments covered in this study. This means there were only two senior academics (professors) to provide leadership and professional support activities connected with research and teaching practice, mentoring of junior academics, directing the work of the university, representing the university in interfacing with wider communities and supervising doctoral students.

Of the four departments of the Faculty of Arts covered in this study, there was only one professor among the teaching staff, 15 were PhD holders, while 30 did not have PhD. This

meant that mentorship of junior academics and supervision of doctoral candidates were the responsibility of one senior academic if quality of supervision was to be maintained. The situation was even more dire in the Faculty of Commerce where, of the four departments covered in this study, the entire faculty, including its leadership, did not have a single professor, while lecturing staff comprised only six PhD holders out of 22.

The HC situation was no better in the Faculty of Education where, of the eight departments covered in this study, there were five professors, six PhD holders, and 40 lecturers without PhD qualification. The scenario was also bad in the Faculty of Engineering where there was no single professor in the entire faculty and departmental leadership. Even among teaching staff, only two were professors, six were PhD holders, while 26 did not have PhD. This clearly indicates a dearth in HC in terms of senior academics to champion research in the institution, which is the country's premier university.

Table 2 shows a worse HC situation at NUST, Zimbabwe's second best university after UZ in terms of national ranking. In the Faculty of Applied Sciences, only two departments out of the eight covered in this study shared the three professors available in the whole faculty. The entire faculty and departmental leadership comprised only two doctorate holders, with the other seven chairpersons being masters' degree holders. The faculty had only 3 PhD holders and 55 non-PhDs. One department (Sports Science and Coaching)'s teaching staff component comprised three lecturers and four teaching assistants (TAs), meaning that TAs constitute the majority of lecturing staff, a very bad HC situation. The Department of Environmental Science and Health had one lecturer (Acting Chairperson) and two TAs, while the Department of Forest Resources and Wild Life Management had two lecturers and two TAs. In the entire faculty, there were only three senior academics in the faculty responsible for mentoring 58 junior academics and carrying out research for the faculty and the institution, over and above carrying out other professorial roles outlined in the literature section of this study.

The Faculty of Commerce seemed to be the worst affected at NUST. Among the Dean and Chairpersons of the four departments covered in this study, not even one member of staff held a PhD. Among the teaching staff, there was no professor and only one PhD holder, while 53 lecturers did not have PhD. The Department of Risk Management and Insurance had seven teaching staff, four of them TAs, meaning the department had more TAs than full-time lecturers. This is a very bad HC situation by an university standards and has a negative impact on academic responsibilities that require the presence of senior academic staff as enunciated in the literature section of the study.

Eight departments in two other faculties at NUST covered in this study (Table 2) fared no better in terms of state of HC. Three departments of the Faculty of Communication and Information Science covered in this study had no professor but only three PhD holders (one of them the Dean), while the rest of the teaching staff – 34 – did not have PhD. In the Faculty of Industrial Technology in the five departments covered in this study, there was no professor, only two PhD holders (both department chairs, with three other chairs holding masters' degrees), and 37 non-PhD holders. The Department of Chemical Engineering had 9 staff members – five lecturers and four TAs, while the Department of Electrical Engineering had three lecturers and three TAs, meaning that half of the teaching staff in the two departments were TAs. This is bad for a university in terms of HC.

The state of HC at Great Zimbabwe University was also dire (Table 3). In the four faculties and 14 departments covered in this study, only one departmental chairperson held PhD with

13 others holding masters' degrees, implying that there was no professor in all the five of the seven faculties of the university studied. All the 14 departments had only two teaching professors, only 10 PhD holders, and 168 non-PhD holders. This meant that such a large number of junior academics looked forward to only two professors for academic mentorship and four faculties and 14 departments looked to two professors for quality research of international standards.

Table 4 shows findings at BUSE which portray a bad HC situation by any university standards. In all the four faculties studied, only two were headed by professors. Out of 13 departments, only four were headed by PhD holders, while nine were chaired by masters' degree holders. The teaching staff component in the 13 departments covered in this study comprised only two professors, 11 PhD holders, and 91 non-PhD holders. Like in other universities covered in this study, BUSE characterised a university bedeviled by a serious shortage of senior academics which has seriously impacted on the quantity and quality of research output hence the university's lack of international recognition.

CONCLUSION

The evidence presented in this study shows that there is a relative paucity of professors and doctoral degree holders at Zimbabwe's universities. The shortage of professors and doctoral degree holders and dominance of academic leadership by masters' degree holders especially at departmental levels at most of the Zimbabwean universities covered in this study raises questions of research credibility and capability that need to be addressed urgently if these institutions are to gain acceptance as reputable members of the global intellectual community. Such recognition is necessary in order to foster collaborative initiatives and build equitable partnerships with counterparts in other parts of the academic world. A quick comparison with some universities in some African countries very close to Zimbabwe helps to paint a real picture of the dire situation of Zimbabwe's universities pointing to a national crisis. For example, the University of the North West Faculty of Agriculture, Science, and Technology had three schools namely School of Environmental and health Sciences, School of Agricultural Sciences, and School of Mathematical and Physical Sciences all headed by Professors. The Faculty of Commerce and Administration was headed by a professor, with all its four schools headed by professors as well.

At the University of Botswana (UB), the Department of Economics, for instance, was headed by a professor, and of its 23 lecturers, nine were professors, while eight were PhD holders. Only 6 (35%) were Masters' degree holders. In 2013, the University of South Africa (UNISA) College of Human Sciences had a total of 472 academics of which 201 (43%) were Professors and Associate Professors (Dube and Ngulube, 2013). These HC situations (at North West, UB, and UNISA) where professors and PhD holders constituted the majority of the academic management and lecturing staff is what should happen in universities all over the world but was in sharp contrast to the situation obtaining at the selected Zimbabwean universities.

Results of the study clearly show absence of a balanced distribution of scholars across the various ranks which is required in order to help build a solid community of scholarship. The results are indicative of a blatant lack of established scholars to mentor others thereby preventing the development and maintenance of a culture of excellence within the universities. The consequences of not having a reasonable distribution of senior academics versus junior

ones are the impact on quality of both research and teaching which deforms a university system and leads to loss of international recognition (Nzeshi, 2008).

REFERENCES

- Adams, D. (2002) *Education and National Development: Priorities, Policies, and Planning*, Asian Development Banks, Comparative Educational Research Centre and the University of Hong Kong.
- Bindura University of Science Education (2015) "Faculties" [Online] <http://www.buse.ac.zw/index.php/2015-07-29-07-03-35> [Accessed 11 December 2015]
- Clark, G. (2009) "The Macroeconomic Aggregates for England, 1209-2008." University of California, Davis, Economics WP 09-19.
- DE Bloom, M Hartley, and H Rosovsky (2006): "Beyond Private Gain: The Public Benefits of Higher Education". In James J. F. Forest and Philip G. Altbach, eds., *International Handbook of Higher Education*
- Dube, L. & Ngulube, P., 2013, 'Pathways for retaining human capital in academic departments of a South African university', *SA Journal of Information Management* 15(2), Art. #560, 8 pages. <http://dx.doi.org/10.4102/sajim.v15i2.560>
- Dzisah, J. and Etzkowitz, H. (2007) "Professors of practice: Reinventing the professorial role", *ENGEVISTA*, Vol. 9, no. 2, pp. 166-173.
- Goldin, C. (2014) "Human Capital", *Handbook of Cliometrics*, Vol 1.
- Great Zimbabwe University (2015) "Faculties" [Online] <http://www.gzu.ac.zw/index.php/gzufaculties> [Accessed 11 December 2015].
- Hugo, G. (2005) Demographic Trends in Australia's Academic Workforce, *Journal of Higher Education Policy and Management*, Vol. 27, no. 3, pp. 327-343.
- Macfarlane, B. (2012) Professors as intellectual leaders: formation, identity and role, *Studies in Higher Education*, 36:1, pp. 57-73.
- Macfarlane, B. 2007 *The academic citizen: The virtue of service in university life*, New York: Routledge.
- Macfarlane, B. (2011) Intellectual leadership and the role of the university professor, SRHE Academic Practice Network, The University of Hong Kong.
- Metcalf, H., Heather, R., Philip, S. and Martin, W. (2005) "Recruitment and Retention of Academic Staff in Higher Education", Research Report 658, London: National Institute of Economic and Social Research.
- National University of Science and Technology (2015) "Faculties" [Online] <http://www.nust.ac.zw/index.php> [Accessed 10 December 2015]
- Nzeshi, O. (2008), "Nigerian Varsities Lack Quality Lecturers", *This Day*, 16 May Online <http://www.thisdayonline.com/nview.php?id=111642> [Accessed 11 December 2015]
- Selesho, J.M. and Naile, I (2014) "Academic staff retention as a human resource factor: University perspective", *International Business & Economics Research Journal*, Vol 13, No 2, pp. 295-304
- Tetty, W.J. (2010) Challenges of developing and retaining the next generation of academics: Deficits in academic staff capacity at African universities, Report commissioned by the Partnership for Higher Education in Africa.
- Tight, M. (2002) "What does it mean to be a professor?" *Higher Education Review*, Vol 34, pp. 15-31.
- UNESCO Institute for Statistics (2005): *Global Education Digest 2005*. UIS, Montreal.

Published by European Centre for Research Training and Development UK (www.eajournals.org)

United Nations Information Service (2000) Press Release No: UNIS/SG/2625. August 3,2000.
<http://www.unis.unvienna.org/unis/pressrels/2000/sg2625.html> (Accessed: 8 December 2015).

University of Western Australia (2015) “Role of Professors Level E”, [Online]
<http://www.uwa.edu.au/> [Accessed 10 December 2015].

University of Zimbabwe (2015) “Faculties” [Online]
<http://www.uz.ac.zw/index.php/faculties> [Accessed 10 December 2015].