

Wang, H & Hong, M. 2015. Study on residential hedonic price classification model based on MDLP binning and support vector machine, *Information Technology Journal*, vol. 13, pp. 2710-2719.

Williams, TP. 2004. Base adjusting in the sales comparison approach, *The Appraisal Journal*, Spring 2004, pp. 155-162.

Wiltshaw, DG. 1995. A comment on methodology and valuation, *Journal of Property Research*, vol. 12, no. 2, pp. 157-161.

Worzala, EM, Lenk, MM & Silva, A. 1995. An exploration of neural networks and its application to real estate valuation, *Journal of Real Estate Research*, vol. 10, no. 2, pp. 185-202.

Yacim, JA & Boshoff, DGB. Forthcoming. Hybridising cuckoo search with Levenberg-Marquardt algorithms to optimise and train artificial neural networks for mass appraisal of properties. *Journal of Real Estate Literature*.

Zadeh, LA. 1965. Fuzzy sets, *Information and Control* Vol. 8, No 3, pp. 338-353.

Zhang, R. & Chen, W. 2009. A study on automated valuation model in mass appraisal system for real property tax. *IEEE*, pp. 254-257

Zurada, J, Levitan, AS & Guan, J. 2011. A comparison of regression and artificial intelligence methods in a mass appraisal context, *Journal of Real Estate Research*, vol. 33, no. 3, pp. 349-387.

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## UNDERGRADUATE REAL ESTATE EDUCATION IN ZIMBABWE: A COMPARATIVE STUDY

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### ABSTRACT

**Purpose** The aim of this study was to establish if there is a national consensus on the real estate body of knowledge in Zimbabwe and to benchmark Zimbabwean property programmes with similar RICS curricula in Africa.

**Design/methods followed/approach** Purposive sampling was used to choose participating institutions. Relevant documents were obtained from either websites of selected institutions or requested by email from relevant officials.

**Findings** The study established that while real estate curricula in Zimbabwe are diverse in nature, they do exhibit a number of similarities. Property programmes in Zimbabwe also compare well with RICS accredited curricula in Africa but there were notable variations on names of programmes, number courses covered and course credits.

**Research limitations/implications** This study was limited to real estate programmes which are offered up to Honours degree level in Zimbabwe and similar RICS accredited programmes which are offered in Africa. Results might be different if one is to consider all RICS accredited real estate programmes. Data was obtained only from document analysis and internet survey, a more detailed results could have been obtained through key informant interviews, questioner survey or focus group discussions.

**Practical implications** Results of this study can be used to standardise real estate education curricula in Africa.

**Originality/ Value of work** Though research on real estate education improved over the past years, this study is the first to consider Zimbabwean curricula in detail.

**KEYWORDS:** *Real estate, comparison, progress, curriculum, consistency, diversity.*

## INTRODUCTION

The aim of this comparative study was to establish if there is a national consensus on the real estate body of knowledge in Zimbabwe and to benchmark Zimbabwean programmes with RICS accredited curricula in Africa. Consistency can be defined as not containing any logical contradiction (Smith, 2001). In this study the comparison criteria was based on the following variables; admission requirements, departments where the programme is housed, programme names, number of credits allocated to courses and programmes, teaching method, duration of study as well as student assessment criteria<sup>1</sup>. Currently there are six tertiary education institutions offering real estate in Zimbabwe. Of the six, three are universities (University of Zimbabwe, Lupane State University & National University of Science and Technology), two are polytechnics (Harare Polytechnic & Bulawayo Polytechnic) and one is a professional institution (The Real Estate Institute of Zimbabwe). Quality assurance for all university curricula in Zimbabwe is done by the Zimbabwe Council of Higher Education (ZIMCHE). For new curricula to be accredited by ZIMCHE, universities are supposed to do wide consultations with industry and other stakeholders. Even though real estate programmes in Zimbabwe are approved by ZIMCHE, none is accredited by the international real estate bodies like The Royal Institution of Chartered Surveyors (RICS) or the Federation for International Surveyors (FIG). This study is based on the recommendations of Eply (1996) and Cloete (2002), who called for a study to establish the current state of real property curricula as a step towards standardisation of real estate education.

<sup>1</sup> Address on how is consistency defined and measured and the comparison criteria

## LITERATURE REVIEW

Real estate education evolved over a long period of time going through various stages in different countries. Dasso and Woodward (1980:404); postulated that formal property education at tertiary level was first introduced in America at the University of Wisconsin in 1892 by Richard Ely. On the contrary the first BSc degree in the UK was offered at the University of London in 1918 (Yu, 2001:80). Small and Karantonis (2001) states that in the continental state of Australia real estate education can be traced back as far as 1927. In its evolutionary trend, real estate education spread globally after the Second World War (it was introduced in 1968 in Singapore and in the late seventies and early eighties in New Zealand and Australia respectively) (Dasso & Woodward, 1980:407; Yu, 2001:80). They also noted that real estate received its professional recognition in the 21st century. Given the long-time which it evolved, one might be tempted to conclude that the period could be considered as long enough for real estate to be an established profession and to have established a body of knowledge.

Two main philosophies exist in real estate education that is the investment approach and the survey approach. In the United States of America (USA), real estate training is housed under the faculties of business or finance; and in the United Kingdom (UK) real estate has its 'roots' in architecture (Boyd, Amidu, & Smith, 2013:06; Chikafalimani, 2010:27; Dasso & Woodward, 1980:405; Jay, 2011:2; Schulte, Schulte-Daxbok, Holzmann, & Wiffler 2005:1; Yu 2001:79). Yu (2001:81) noted that as pioneers of formal real estate education, UK and USA models had a great impact on shaping modern day real estate curricula world-wide. The survey approach was adopted in most former British colonies and commonwealth countries which is an indication that history has an influence on the approach which is followed from one country to the other. Accordingly the ideology which a country is following determines the faculty where the property programme is housed.

Other scholars classify real estate paradigms into three main categories instead of two. Schulte *et al* (2005:1) and Schulte (2001a) classified real estate education approaches into three which are; the survey approach (which is practised in the United Kingdom and the British Commonwealth countries),

the investment and finance approach (which is mainly practised in the USA) and the inter-disciplinary approach (which is practised in the Continental Europe). This shows that due to globalisation some countries have blended the survey and investment approach to come up with a hybrid or combined approach to real property education.

Unlike other academic fields like finance and economics, real estate struggled to establish consensus in the “basic content of knowledge and skills at both the undergraduate and postgraduate level” (Eply, 1996). As noted by a number of scholars there is no universally accepted real estate body of knowledge that constitutes what should be taught in all programmes (Eply, 1996; Boyd *et al*, 2013:06; Chikafalimani, 2010:27; Dasso & Woodward, 1980:405; Jay, 2011:2; Schulte *et al* 2005:1; Yu 2001:79; Weeks & Finch, 2003). Such a state of affairs has resulted in differences in the way real estate education is done in different countries. This has been observed by Mooya (2007) as well as Dasso and Woodward (1880) who pointed out that the differences exist because real estate developed differently in various nations. Boyd<sup>2</sup> *et al* (2013) and Yu (2001:82) are of the view that lack of consensus in the real estate body of knowledge can be attributed to the diverse and dynamic nature of the property industry. As noted by Weeks and Finch (2003), lack of standardisation in real estate curricula is also caused by property stakeholders who advocate for diverging directions in real estate curriculum development. Stakeholders in the property industry include tenants, land lords, property agents, and government institutions all with conflicting interests.

Eply (1996) shared the same sentiments and supported his argument by giving examples of various presentations at real estate annual conferences where presenters researched on widely diverse topics.

Despite variations in real estate education across the globe, there exists a common goal which is highest and best use of land (Mooya, 2007:11; Boykin, 1985:349). The widely used indicator of highest and best use of land is economic value.

<sup>2</sup> Address on what are the causes of lack of uniformity apart from history of programs

The institution’s philosophy can also contribute to the differences in real estate curricula. Standardisation of real estate curricula facilitates transfer of students from one institution to the other as they would have gained similar competencies. However standardisation of property curricula has its own weaknesses - it can stifle innovation. For example, universities can be inhibited to offer unique curricula in order to attract students. Also, universities’ curricula are designed to address challenges in the specific local environment, hence heterogeneity in real estate curricula might be an indication of variations in stakeholder preferences and local challenges.<sup>3</sup>

In Africa, the approaches to real estate education is a replica of the practices used in USA and UK. This is evidenced by the diverse and multidisciplinary nature of real estate curricula in the Africa region (Viruly & Hopkins, 2014:11; Serfontein, 2014; Kampamba, Nkwae & Tembo, 2015; Mooya, 2007). According to Mooya (2007:14), property education is not very new to Africa as indicated by numerous examples of African universities where real estate education has been in existence for many years. The examples of such universities include; University of Science and Technology in Ghana, Copperbelt University in Zambia, Ardhi University in Tanzania (former Ardhi Institute), the University of Nairobi in Kenya and Obafemi University in Nigeria (ibid, 2007).

Nzioki, Kariuki, & Marigu (2006) stated that Kenya is one of the pioneers of formal real estate education in Africa. The first degree in land management in Kenya was introduced in 1956 at the then Technical College of East Africa now University of Nairobi, the degree curriculum was modelled after the RICS curriculum (ibid, 2006). According to Groenendijk *et al* (2013:1) the curriculum content of land administration degree programmes offered in East Africa are generally similar in nature and broad in coverage. The first real property degree in Ethiopia was introduced in 2004 at Bahir Dar University, and Rwanda’s first real estate degree was introduced in 2012 at the INES-Ruhengeri Institute of Applied Science (Groenendijk *et al*, 2013).

<sup>3</sup> Address on – Are there benefits to the lack of uniformity? And What would be lost if we standardise?

Real estate training in Nigeria started in 1957 at the then Nigerian College of Arts, Science and Technology, Enugu campus (now Enugu campus of the University of Nigeria). The curriculum was modelled after that of Britain with a focus in the built environment and surveying to prepare students for the RICS examinations (Ashaolu, 2012; Ezema, Oluwatayo, Adewale and Aderonmu, 2014). This is in resemblance to how the first real estate curriculum was designed in Kenya. Other universities who were among the pioneers of real estate education in Nigeria include, among others, University of Ife (now Obafemi Awolowo University) in 1970, University of Lagos in 1982 and the Federal University of Technology (ibid, 2012). Real estate education in Nigeria is standardised due to the fact that there are prerequisite courses which a real estate programme must cover for it (the real estate programme) to be accredited by the National Universities Commission (Ezema *et al*, 2014). Serfontein (2014:40) established that Nigeria has more universities offering real estate education in Africa with approximately fifteen universities, followed by South Africa with seven universities and the rest of the African countries which have between one and two universities offering real each.

As observed by Kampamba *et al* (2015), there is no standardisation of real estate education curricula in Botswana. They also noted that real estate programmes in Botswana offer diverse subjects with some notable similarities in courses offered. Such a scenario is also found in South Africa as noted by Mooya, 2007:15. Both Kampamba *et al* (2015:116) and Mooya (2007) agree that lack of standardisation in real estate education curricula is an indication that there is no national consensus on the real estate body of knowledge.

Cloete (2002:377) noted that in the Southern African region very few educational institutions offered real estate education at that stage, especially at post-graduate level. He did note, however, that recognition of real estate as a profession gained momentum over the last decade of the twentieth century and this saw countries like South Africa introducing formal real estate programmes at Universities and Technikons (now Universities of Technology). Mooya (2007:13) and Jay (2011:02) noted that real estate programmes in

South Africa are housed under the construction departments and the educational system in South African curricula is typically Eurocentric in nature. This may be explained perhaps by the fact that South Africa inherited education philosophies from its former colonial master. Though South Africa introduced formal real estate education later than other African countries, it managed to make remarkable progress over the past two decades. Consequently it is one of the few African countries offering RICS accredited programmes (RICS, 2008; RICS, 2012), and to offer real estate programmes up-to Doctorate degree level (Mooya, 2007:15; University of Pretoria (UP), 2015b; University of Cape Town (UCT), 2015c). The MSc (Real Estate) degree introduced by the University of Pretoria in 1990 was in fact the first master's degree by coursework in Real Estate *per se* in Africa, as well as the first Master's degree in Real Estate in Africa to be accredited by the RICS.

In Zimbabwe the recognition of real estate at universities gained momentum in the past six years. Nevertheless none of the existing curricula is accredited by international real estate institutions like RICS. With the current trends where education has gone global, academic institutions in Zimbabwe need to work towards offering internationally recognised curricula. Offering internationally accredited real estate programmes can give Zimbabwean real estate education institutions a comparative advantage in attracting students across the globe. Given the fact that Zimbabwe is currently 'exporting' most of its labour to regional and international markets it is important to benchmark existing real estate curricula with internationally accredited programmes. Kampamba *et al* (2015); noted that graduates of real estate programmes are mobile and can be employed in other countries which justifies the need for accreditation of local curricula by international bodies. It is essential to note that real estate business has gone global, hence real estate education institutions must aim to produce internationally proficient graduates Schulte *et al* (2005). RICS accredited programmes which are offered by African education institutions were used as a yardstick for benchmarking Zimbabwean curricula.

Why RICS accredited programmes in Africa? According to Schulte *et al* (2005), RICS has managed to spread operations internationally and has managed to

collaborate with national and regional real estate institutions. RICS<sup>4</sup> accredited programmes are accredited using the five quality principles which are: student selection, research and innovation, teaching quality, curriculum, and graduate output (RICS, 2012). Where partnership exists between RICS and universities, quantifiable and measurable standards are set as a yardstick to measure if the five principles are met (ibid, 2012). In this study the comparison criteria were based on the following variables: student admission criteria, department where the programme is housed, programme name, course content, course credit hours, student assessment criteria and duration of study.

Although<sup>5</sup> research on the real estate education has increased over the past years (Jay, 2011; Kampamba *et al*, 2015; Schulte *et al*, 2005, Mooya, 2007, Ezema *et al*, 2014; Chikafalimani, 2010, Cloete, 2002), there is limited empirical research on property education in Zimbabwe. Schulte (2002) conducted a study in real estate education worldwide. Although it was comprehensive, it was done at a time when most real estate programmes were not yet introduced in Zimbabwe. Furthermore the South African Qualification Authority (SAQA) (2012) conducted a study on real estate education in Africa but even though by that time real estate was introduced at university level, the study was internet based while most institutions in Zimbabwe were yet to fully make use of information technology. From that study SAQA only managed to get data on the real estate programmes which were offered by international educational institutions. The institutions include the Commercial Real Estate Institute and the College of People Management and Development as well as the Certified Commercial Investment Member Institute. However most if not all of these institutions are not formally registered as educational institutions as required by Zimbabwean laws.

The results of the SAQA (2012) study might be attributed to the fact that since the research was internet based and at that stage websites of most academic institutions were still developing or were yet to be developed, less or no rele-

<sup>4</sup> Address on comparison criteria

<sup>5</sup> Address on – identifying the contribution that this work could make to the existing literature.

ant data were obtain from public institutions of higher learning. Furthermore, Chikafalimani (2010) did a comparative study of real estate curricula which covers Zimbabwe but since his study was focused on postgraduate real estate programmes, Zimbabwean undergraduate real estate programmes were not covered. More recent studies were done by Serfontein (2014) as well as Kampamba, Nkwae and Tembo, (2015). Serfontein (2014) did not manage to obtain relevant data on existing real estate curricula in Zimbabwe. She only noted a programme which was introduced by NUST in 2014 and failed to get information on the real estate programmes which are offered by UZ, REIZ, IPTC and BPTC. She explained that no relevant data was obtained from Zimbabwe due to poor questionnaire response and as a result programmes from Zimbabwe were not included in her study. A study by Kampamba *et al* (2015) was broad and comprehensive. They covered undergraduate real estate curricula in Zimbabwe but their results did not provide detailed information about existing Zimbabwean real estate programmes as their main focus was real estate curricula in Botswana.

The present study seeks to answer two key questions: Is there a national consensus in the real estate body of knowledge in Zimbabwe and are Zimbabwean real estate curricula comparable to similar RICS accredited programmes in Africa?

#### RESEARCH APPROACH

This research consisted of internet research and document analysis. Data on real estate education institutions which offer RICS accredited programmes were obtained through internet research. The researchers used their knowledge of the problem under study to select real estate education institutions in Zimbabwe and relevant documents were obtained either from websites of selected institutions or were requested by emails from relevant authorities.

Data management and analysis was done continuously as a way of identifying emerging themes and developing them with further study. The limitation of this strategy was that there were challenges when analysing the findings.

## RESULTS AND ANALYSIS

The study took a descriptive research design approach. According to Kothari (2004), descriptive design is mainly used when describing the present state of affairs of the subject under study and it includes comparative and correlation research methods. Since the aim of this study was to establish and describe the state of existing real estate curriculum in Zimbabwe, the descriptive approach was the appropriate design. A triangulation research approach with main emphasis on qualitative research methods was adopted. According to Spillman (2014), the advantage offered by mixed methods is that they provide complementary data. The findings of this study were based on data collected through internet survey and document analysis. Programme prospectus, course outlines and study guides from websites of selected institutions and in other cases they (study guides & programme prospectus) were request through email from relevant officials.<sup>6</sup> Table 1 below displays real estate programmes offered in Zimbabwe.

**Table 1: Departments where real estate programmes are housed in Zimbabwe**

Institution	Department/Division	Programme name	Duration of study	Delivery mode	Admission requirements
University of Zimbabwe (UZ)	Rural and Urban Planning	Bachelor of Science Honours Degree in Real Estate Management	4 years	Full time	Two Advanced level subjects

<sup>6</sup> Address on research approach

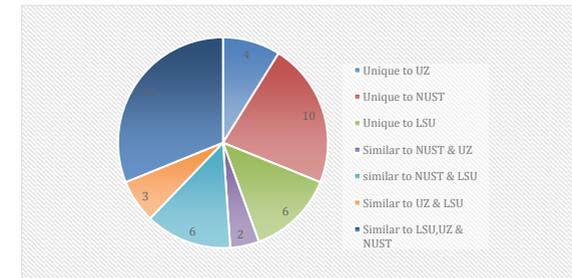
National University of Science and Technology (NUST)	Department of Landscape Architecture and Urban Design	Bachelor of Science Honours Degree in Property Development and Estate Management	4 years	Part time	Two Advanced level subjects
Lupane State University (LSU)	Department of Accounting and Finance	Bachelor of Commerce Honours Degree in Real Estate Management	4 years	Part time	Two Advanced level subject
Harare Polytechnic colleges (BPTC)	Civil Engineering Division	Certificate and Diploma in Valuation and Estate Management	4 years	Full time	Five Ordinary level subjects
Bulawayo Polytechnic	Civil Engineering Division	Certificate and Diploma in Valuation and	4 years	Part time	Five Ordinary level subjects

college (BPTC)		Estate Management			
Real Estate Institute of Zimbabwe (REIZ)	Professional body	Diploma in Real Estate	2 years	Part time	Five Ordinary level subjects
Estates Agents Council of Zimbabwe (EAC)	Professional body	Certificate in Real Estate	1 year	Part time	Five Ordinary level subjects

Source: (UZ, 2015; NUST, 2015; LSU, 2015; HPTC, 2015; REIZ, 2015; EAC, 2015; BPTC, 2015).

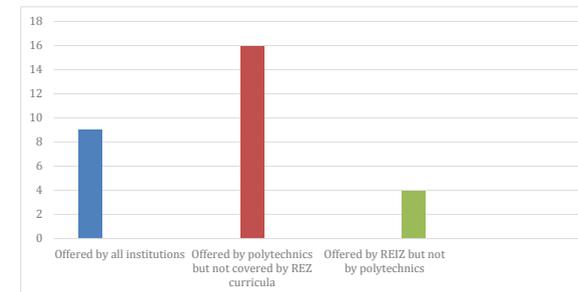
**A) IS THERE CONSISTENCY IN THE REAL ESTATE BODY OF KNOWLEDGE IN ZIMBABWE?**

With reference to Table 1 it can be noted that real estate educators in Zimbabwe do not agree on the department where real estate must be housed, name of real estate programmes and delivery mode. Standardisation of real estate curricula can also be established by comparing course contents. Figure 1 below compare real estate curricula offered in Zimbabwe at Honours degree level.



**Figure 1: Comparison of Honours degree course content.** Source: UZ (2015), NUST (2015), LSU (2015).

Real estate programmes offered at Honours degree level in Zimbabwe cover forty-eight (48) courses. 30.23% of the courses which are similar at all universities, 9.30% are offered by UZ only, 23% are unique to the NUST curricula and 13.95% are unique to the LSU programme. 6.98% of the courses are similar to UZ and LSU, 13.95% are similar to LSU and NUST, while 4.65% are similar to UZ and NUST. A total of 56% of the courses are offered by at least two universities and 44% of the courses are offered by only one university when combined. Figure 2 below is a comparison of Zimbabwean real estate diploma programmes.



**Figure 2: Comparison of Zimbabwean diploma in real estate curricula.**

Source: (REIZ, 2015; BPTC, 2015; HPTC, 2015).

At National diploma and certificate level 39% of courses are similar while 61% are different. When compared separately academic programmes offered by polytechnics have 100% similarities while those offered by professional bodies have 100% similarities as well. Table 2 below compares Zimbabwean real estate courses offered at National Certificate level.

**Table 2: Comparison of real estate curricula at certificate level in Zimbabwe**

No	Course	Institution		
		HPTC	BPTC	EAC
1	Valuation 1	√	√	√
2	Law for valuation 1	√	√	√
3	Town planning (Town planning 1 & 2)	√	√	X
4	Technical drawing	√	√	X
5	Construction technology/building construction 1	√	√	√
6	Mathematics	√	√	X
7	Accounts/book keeping & finance	√	√	√

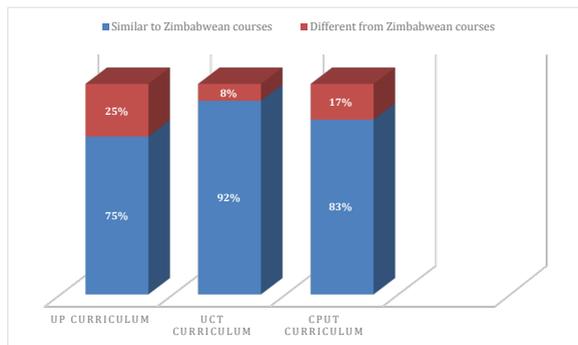
8	Building construction 1	X	X	√
9	Commercial law	X	X	√

At certificate level nine subjects are offered of which 54% of the subjects are offered by polytechnics, 31% of the courses are similar at all institutions and 15% is offered by EAC alone.

**B) HOW DOES REAL ESTATE CURRICULA IN ZIMBABWE COMPARE WITH SIMILAR RICS ACCREDITED PROGRAMMES IN AFRICA?**

This study established that South Africa was the only African country with universities which are offering RICS accredited real estate curricula in Africa. It<sup>7</sup> is important to note that quality assurance for higher education in South Africa is done by the South African Council for Higher Education, which is similar to the Zimbabwe Council of Higher Education. The philosophies followed by quality assurance institutions can also have an impact on real estate curricula diversity. For example these institutions can dictate that for a real estate curricula to be approved, it must be housed at say the built environment department and have a minimum of say 300 credits whilst being offered over a duration of say four years. South African real estate programmes which were considered for this study are the Honours degree programmes offered by the University of Pretoria (UP) and the University of Cape Town (UCT) and a Diploma offered by the Cape Peninsula University of Technology (CPUT). Figure 3 below is a summary of how these real estate programmes compare with Zimbabwean programmes in terms of course coverage.

<sup>7</sup> Address on institutional differences



**Figure 3: Comparison of Zimbabwean real estate programmes with similar RICS accredited curricula in Africa by course coverage.** Source: (UP, 2015a; UCT, 2015a & b; UZ, 2015; NUST, 2015; LSU, 2015, HPTC, 2015; BPTC, 2015; EAC, 2015).

## 1. CURRICULA SIMILARITIES

### *i) Course content*

Ninety-two (92%) of UCT courses and 75% of UP courses are similar to those covered by Zimbabwean universities. Eighty-three percent (83%) of the courses which are offered at CPUT are similar with the ones offered in Zimbabwe. This indicates that diploma curricula which are offered in Zimbabwe compare well with RICS accredited curricula in Africa. This supports the findings of Serfontein (2014) that real estate programmes which are offered in Africa compare well.

### *ii) Student admission requirements*

Admission requirements for entry to a real estate qualification are similar for all institutions. The UP, UCT and CPUT, require a National Seniors Certificate which is equivalent to a General Certificate in Education (Advanced level) in Zimbabwe.

### *iii) Duration of study*

There is 100% agreement between local universities as well as UP and UCT on the duration of study for an Honours degree programme. Real estate educational programmes at all of the five institutions (UP, UCT, NUST, UZ and LSU) are offered over a duration of four years.

### *iv) Student assessment criteria*

There is a total agreement on student assessment criterion which include writing of tests, assignments, presentations, internships as well as conducting an academic research study to name but just a few. This supports the findings of Kaoulizos (2006).

## 2. CURRICULA DIVERSITY

### *i) Names of real estate programmes and courses*

There was 100% disagreement on the names of the real estate programmes which are offered at Honours degree level locally and those offered by RICS accredited institutions in Africa. Locally all existing programmes do not agree on the programme name (at UZ it is called BSc Honours degree in Real Estate Management, at NUST it is called BSc Honours degree in Property Development & Estate Management while at LSU the programme is called BCom Honours in Real Estate Management). On the other hand a similar curriculum which is offered by UCT is called BSc Honours degree in Property Studies and at UP it is called BSc Honours degree in Real Estate. This is an indication to the fact that real estate education institutions are not in agreement on the most appropriate name for a real estate programme at Honours degree level.

UP courses with names similar to Zimbabwean courses are twelve (12) while eleven UCT courses have similar names with those offered in Zimbabwe. A comparison of UCT and UP course names shows that only four courses have similar titles and each of the two universities has seventeen (17) courses with names which are neither similar to Zimbabwean courses

nor to each other. However a closer scrutiny of the results revealed that similar courses are named differently by different universities. A good example of a course with the same contents which is named differently is that of research. At UZ and LSU the course is called dissertation, at NUST it is called property studies research project, at UP it is called research report and at UCT it is called treatise.

**ii) Course composition**

There is a 100% disagreement on the number of courses covered by real estate programmes. In Zimbabwe each of the three universities which offer real estate has a curriculum which covers different courses in terms of number and credits. The UZ curriculum covers thirty-two (32) courses, at NUST real estate covers forty-one (41) courses, LSU curriculum covers forty-three courses while at UCT real estate is comprised of thirty-seven (37) courses. The UP programme is comprised of sixty-four (64) courses. For the sake of comparison the percentage content of the major real estate courses were considered for each of the five universities (UZ, NUST, LSU, UP & UCT). Table 3 below is a comparative summary of Honours degree curricula composition.

**Table 3: A comparison of Zimbabwean and internationally accredited real estate curricula in terms of percentage of course content**

Course	Institution & course percentage in the curriculum				
	UZ	NUS T	LSU	UCT	UP
Investment and finance	16%	12%	22%	2%	11%
Marketing	-	3%	3%	-	3%

Valuation/ appraisal	13%	10%	11%	7%	9%
Law	6%	8%	6%	17%	5%
Land economics	16%	10%	8%	2%	2%
Development	6%	7%	3%	2%	11%
Estate agency	3%	-	3%	-	-
Property management	6%	5%	8%	7%	3%
Construction	9%	20%	8%	12%	31%
Other	25%	25%	28%	50%	25%
Total	100%	100%	100%	100%	100%

Source: Adopted and modified from Mooya (2007:14).

As shown on Table 3 above there is total disagreement on the percentage of course composition for real estate programmes. For example, even though all institutions offer property development at Honours degree level, the percentage of the course in the total curriculum varies (6% at UZ, 7% at NUST, 3% at LSU, 2% at UCT and 11% at UP).

At UCT real estate curriculum consists of compulsory and elective courses while in Zimbabwe real estate consists of only compulsory course subjects. In this case Zimbabwe can learn from UCT as introduction of elective courses may help in easing the course composition gap as programmes which are not offered by other universities may be intro-

duced as elective courses. This might bring uniformity in real estate education. The UP programme is more similar to those offered in Zimbabwe in that it does not have elective courses.

On the other hand, Zimbabwean universities put more emphasis on internship as shown by the fact the whole year is dedicated to work related learning whilst at UCT there is no provision for internship. Though internship is a requirement for a student studying real estate at UP, the time which that student is required to spend is less as compared to what is expected of a student studying the same course in Zimbabwe. The importance given to work related learning by Zimbabwean Universities is in line with the recommendations of Callanan and McCarthy (2003 cited by Jay, 2011:62) that students must have work related learning through internship at an approved property company for at least 450 hours over a 12-month period. The importance of combining professional experience with classroom learning in real estate education was also stressed by Rabinski (2003:25) as well as Haynes and Nunnington (2009).

Courses which are offered by UCT and UP curricular but which are not covered by Zimbabwean universities include housing, business law, property finance and property information systems. All Zimbabwean universities do not offer housing as a subject despite the fact that housing shortage is considered to be one of the major challenges facing the nation at the moment (Government of Zimbabwe, 2012; Mangudya, 2014). The fact that housing which is considered as important by the Government of Zimbabwe is not part of the existing property curricula might be an indication that the existing undergraduate real estate curricula in Zimbabwe are 'divorced' from the knowledge requirements of the property industry.

### **iii) Department where programme is housed**

While real estate offered at Honours degree level are offered by a unique department at each of the three universities in Zimbabwe, real estate at UCT and UP are housed under more or less similar departments. At UCT real estate is offered by the Department of Construction Economics and Management and at UP the same programme is offered under the Department of Construction Economics. However Zimbabwean polytechnics offer a standardised curriculum which is housed under an engineering department. In contrary at CPUT a real estate curriculum similar to those offered by polytechnics in Zimbabwe is offered by the Unit of Applied Economics. Disagreements in departments housing real estate education in Africa were also noted by other scholars (Chikafalimani, 2010; Kam-pamba *et al*, 2015; Viruly and Hopkins, 2014).

### **iv) Duration of study**

Unlike the case with real estate which is offered by universities, real estate courses which are offered at national diploma level vary in length. In Zimbabwe at polytechnics the diploma is completed after a minimum of four years while the same qualification is offered by REIZ over a period of two years. At CPUT a National diploma in real estate is offered over a period of three years. The main difference between the CPUT programme and those which are offered by Zimbabwean polytechnics is that it is not mandatory at CPUT for students to gain practical exposure through internship.

### **v) Teaching methods**

In Zimbabwe real estate programmes which are offered by polytechnics and universities require at least one year of internship. This goes in line with what was noted by some scholars (Callanan and McCarthy, 2003 cited by Jay, 2011:62; Haynes & Nunnington, 2009; Rabinski, 2003:25). However, this is not the case with similar programmes which are recognised by RICS as there is less emphasis on requirements for work related learning as evidenced by the UP, UCT and CPUT curricula. This means that students from UCT and CPUT lack practical professional experience

upon graduation as compared to graduates from Zimbabwe. Lack of emphasis on practical experience by South African real estate programme was also noted by Jay (2011) and Chikafalimani (2010).

*vi) Allocated credits*

There is a total disagreement on credits allocated to real estate programmes (at UZ 516 credits are allocated to real estate, at UCT 576 credits are allocated while at LSU 188 credits are allocated and at UP real estate consists of 500 credits). No information was available on credits allocated to real estate at NUST. These variations in credits allocation are an indication that there is no consensus on the weight of real estate courses locally and regionally. This might pose a challenge for students if they wish to transfer their credits from one institution to the other. It can be noted that lack of agreement on real estate credits might not be unique to Zimbabwe alone but it appears to be a regional if not an international challenge.

*vii) Delivery mode*

In Zimbabwe real estate is taught either on a part-time or full-time basis. At NUST, LSU, REIZ, BPTC and EAC real estate is offered on part-time basis while at UZ and HPTC the same qualification is offered on full-time basis. At UCT and UP real estate is delivered on a full-time basis while at CPUT real estate is a part-time programme.

## CONCLUSION

This paper established that real estate curricula in Zimbabwe are (a) not standardized and (b) are multidisciplinary in nature with a bias towards engineering courses. At most institutions real estate programmes are housed under survey related departments. Honours degrees in real estate in Zimbabwe have 56% of their courses which are similar and 44% of course subjects are different. At National diploma and certificate level 39% of courses are similar while 61% are different. When compared separately academic programmes offered by polytechnics 100% have similarities, while those offered by professional bodies have 100% similarities as well. Real estate programmes which are offered at certificate level cover nine subjects of which 54% of the subjects are offered by polytechnics, 31% of the courses are similar at all institutions and 15% is offered by EAC alone. This study concluded that, to a greater extent there is consistency in existing real estate curricula in Zimbabwe. However, there are also notable variations in real estate programmes which are currently offered in Zimbabwe as shown by differences in programme names and allocated credits just to point a few areas of variations.

There were notable similarities and differences between real estate curricula locally and when compared to RICS accredited curricula. Notable agreements were noted on course contents where 92% of subjects offered at UCT and 75% of UP curricula are similar to those offered by Honours degree programmes in Zimbabwe. Also 83% of courses which are offered at CPUT are similar to those offered by local diploma programmes in Zimbabwe. Furthermore, there were total agreement on student admission requirement, teaching methods and duration of study for Honours degree real estate programmes.

There were however differences in the number of courses, number of credits, programme and course names and well as the departments where programmes were housed. Variances between RICS accredited real estate programmes and Zimbabwean programmes were also noted in the duration of a National Diploma in real estate. In Zimbabwe the period of study is four (4) years while at CPUT it is three (3) years. The difference in study duration might be as a result of the fact that Zimbabwean requires one year work related learning (internship) which is not part of the CPUT curriculum.

## REFERENCES

- Ashaolu, T., A. 2012. A need to re-define the status of professional valuation: The Nigerian Perspective. In: Laryea, S., Agyempong, S. A., Leiringer, R. and Hughes, W. (eds.), *Proceedings of the WABER Conference*, Abuja, 24 – 26 July, 2012: 313 – 328.
- Boyd, D., Amidu, A. and Smith, M. 2013. Practice based body of real estate knowledge. *RICS Report*, November 2013. London, RICS.
- Boykin J. H. 1985. Review and prospects for real estate appraisal education. *The Appraisal Journal*, 53: 347-353.
- Bulawayo Polytechnic College. 2015. Course outline for National diploma in Valuation and Estate Management. Harare: Civil Engineering Division, Harare Polytechnic College.
- Cape Peninsula University of Technology. 2015. Study guide for National Diploma in Real Estate course. Cape Town: Unit for Applied Economics, Cape Peninsula University of Technology.
- Chikafalimani, S.H.P., 2010. A critical assessment of postgraduate realestate education in the Republic of South Africa. Unpublished Doctoral thesis. Pretoria: University of Pretoria.
- Cloete, C. E. 2002. Progress in Real Estate education in South Africa. *Property Management*, 20(5): 369-382.
- Dasso, J. and Woodward, L. 1980. Real Estate Education: past, present and future- the search for a discipline. *AREUEA JOURNAL*, 8:404-416.
- Estate Agents Council of Zimbabwe. 2015. Estate Agents Council Examination information sheet. Harare: Estate Agents Council of Zimbabwe.
- Ezema, I. C., Oluwatayo, A, Adewale, B. and Aderonma, P. 2014. Professional training of real estate students: A study of academic curricula of three universities in Nigeria.
- Groenendijk, L., Hagenimana, F., Lengoiboni, M., Husen, S., Musingu, M., Ndjovu, C., and Wayumba, G. 2013. Land administration academic education in Eastern Africa. A paper presented at the *FIG working week, environment for sustainability*, Abuja, Nigeria 6 -10 May.
- Harare Polytechnic College. 2015. Course outline for National Diploma in Valuation and Estate Management. Harare: Civil Engineering Division, Harare Polytechnic College.
- Haynes B. P. & Nunnington N. 2009. An evaluation of corporate real estate teaching in the United Kingdom. [Online] Available from: [http://www.prrs.net/papers/Haynes\\_An\\_Evaluation\\_Of\\_Corporate\\_Real\\_Estate.pdf](http://www.prrs.net/papers/Haynes_An_Evaluation_Of_Corporate_Real_Estate.pdf) [Accessed: 2014-11-26].
- Jay, G. M. 2011. The views of the property industry on the curriculum of the undergraduate property studies degree in the School of Construction Economics and Management at the University of the Witwatersrand. Unpublished master's dissertation. Johannesburg: University of Witwatersrand.
- Kampamba, J., Nkwae, B., & Tembo, E. 2015. A comparative analysis of real estate education curricula in Botswana. *Mediterranean Journal of Social Sciences* 6(5):105-116.
- Kothari, C. R. 2004. *Research methodology, methods and techniques*, second revised edition. Delhi, New Age.
- Lupane State University. 2015. Course outline for Bachelor of Commerce Honours degree in Real Estate Management. Bulawayo: Department of Accounting and Finance, Lupane State University.
- Mangudya, J., P. 2014. *Financial stability report, 30 June 2014*. Harare: Reserve Bank of Zimbabwe.
- Mooya, M. M. 2007. The impact of property education in property research in South Africa: a review. *RICS Research Paper Series 7(9): 8-28*.
- National University of Science and Technology. 2015. Course outline for Bachelor of Science Honours degree in Property Development and Estate Management. Bulawayo: Department of Landscape Architecture and Urban Design, National University of Science and Technology.

Nzioki, N., Kariuki, C. and Marigu, J. 2006. Education and training in valuation, land management and housing in Kenya. *Paper presented at the xxiii FIG Congress. Munich, Germany*: October 8-13.

Rabianski, J. S. (2003) Education in the real estate profession. *Real Estate Issues*, 28(2): 21-28.

Real Estate Institute of Zimbabwe. 2015. The Real Institute of Zimbabwe Information leaflet. Harare: Real Estate Institute of Zimbabwe.

Royal Institution of Chartered Surveyors. 2008. RICS accredited courses: higher education courses in land, real estate and construction. London: RICS.

Royal Institute of Chartered Surveyors. 2012. RICS accredited courses: developing your career in surveying. London: RICS.

Schulte, K., W. Schulte-Daxbok, G. Holzmann, C. and Wiffler, M. 2005. Internationalisation of real estate education: *Paper presented at the Geo-informatics (FIG) working week 2005 and GSDI-8, Egypt 16-21, 2005*.

Schulte, K. W. (ed.) 2002. *Real estate education throughout the world: past, present and future*. Boston, Kluwer.

Schulte, K., W. 2001. Interdisciplinary approach of real estate education. Paper presented at the *Pacific Rim Real Estate Society Seventh Annual Conference 21-24 January 2001, Adelaide, Australia*.

Serfontein, M. 2014. An assessment of the real estate education in an African context. Unpublished MSc mini-dissertation. Pretoria: University of Pretoria.

Small, G. and Karantonis, A. 2001. Property education, training and phenomenism. Paper presented at the *2001 Pacific Rim Real Estate Society Seventh Annual Conference 21-24 January 2001, Adelaide, Australia*.

South African Qualification Authority. 2012. *Registered qualification- 2012, Further and Training Certificate: Real Estate*. Pretoria, South Africa. [Online] Available from: <http://regqs.saqa.org.za/showQualification.php?id=59097> [Accessed: 2014-09-12].

Spillman, L. 2014. Mixed methods and the logic of qualitative inference. *Qualitative Sociology*, 37(2)189-205. [Online] Available from: Business Source Complete, EBSCOhost [viewed: 25 June 2015].

University of Cape Town. 2015a. Course outline for Bachelor of Science degree in Property Studies. Cape Town: Department of Construction Economics and Management, University of Cape Town.

University of Cape Town. 2015b. Course outline for Bachelor of Science Honours degree in Property. Cape Town: Department of Construction Economics and Management, University of Cape Town.

University of Cape Town. 2015c. Postgraduate research based degrees. Pretoria: Department of Construction Economics and Management, University of Cape Town.

University of Pretoria. 2015a. School for the Built Environment 2015 year book. Pretoria: Department of Construction Economics, University of Pretoria.

University of Pretoria. 2015b. Post graduate MSc & PHD. Pretoria: Department of Construction Economics, University of Pretoria.

University of Zimbabwe. 2015. Course outline for Bachelor of Science Honours degree in Real Estate Management. Harare: Department of Rural and Urban Planning, University of Zimbabwe.

Viruly, F. And Hopkins, N. 2014. Unleashing Sub-Saharan Africa property markets: *RICS September 2014 Report*. London, RICS.

Weeks, S. H. and Finch, H. J. 2003. *An analysis of real estate curriculum requirements at AACSB international accredited institutions*. *Journal of Estate Practice and Education* 6(2):257-268.

Yu, S. 2001. New paradigms in real estate education. *Pacific Rim Property Research Journal*, Volume (7)2:79-88.