

Programme design and credit weighting in tertiary institutions in Zimbabwe: Meeting minimum quality assurance standards

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Abstract

This article provide a framework for the Zimbabwe Council for Higher Education (ZIMCHE) for setting minimum benchmarks for programme design and credit weighting by both public and private universities in Zimbabwe. The setting of minimum benchmarks is critical especially at present, when ZIMCHE has begun developing quality assurance instruments and guidelines that ensure controlled flexibility, comparability and competitiveness in academic systems and practices among the country's tertiary institutions. The present article is the first attempt to stimulate and promote dialogue and reflection on important indicators of quality assurance standards such as programme design and credit weighting. The dialogue is necessary for two reasons: (a) ZIMCHE only started assuming its role as a quality assurance agency seriously in 2013 and the quality assurance discourse is still fairly new to most of its members. This means that they are learning on the job and (b) tertiary institutions are expected to develop their credit system policies and still achieve convergence with others in the absence of a National Qualification Framework (NQF) and Credit accumulation and Transfer (CAT) guidelines. The author assumes that ideas raised in this article do not only provide a framework for achieving a national template for academic benchmarking but stimulates discussion and dialogue on achieving that template.

Introduction

Most 21st century higher education institutions use the model of programme design and system of determining credit value as indicators and mechanisms of quality assurance (QA). Hayward (2006, p. 4) says, "The development and utilisation of effective mechanisms for quality assurance and improvement are critical to successful higher education everywhere". Concern about the quality of higher education is on the rise in Zimbabwe as it is in the rest of Africa. It comes at a time when the country is witnessing a potentially powerful rate of tertiary education growth, and its natural response by various stakeholders, including both higher education experts and employers who have severely questioned the quality of education (Kadhila et al., 2013, p. 190). The criticism is premised on the fact that the increase in the number of universities established by the state does not often correspond to the provision of finances, infrastructure and availability of highly qualified and competent teaching staff.

In Zimbabwe, the Zimbabwe Council for Higher Education (ZIMCHE) is in the process of developing mechanisms for enforcing a systematic system of quality assurance in higher education in the country's public and private universities. Meanwhile, the Council has begun the process of programme accreditation and peer review. In higher education, quality assurance refers to "fitness for purpose", that is, meeting or conforming to generally accepted standards as defined by an institution (internal QA), quality assurance bodies (external QA), appropriate academic and professional communities and other relevant stakeholders in the diverse arena of higher education. Fitness for purpose factors include an institution's mission, vision and goals; programme and courses/modules; expertise of teaching staff; method of measuring, describing and recording student input required to achieve the learning objectives and outcomes of a programme or course; admission and assessment standards; the teaching and learning environment and quality of library and laboratories; management effectiveness and governance and leadership (Marjorie, 2004).

Every country has a national quality assurance agency, in Zimbabwe's case, ZIMCHE, which performs the following functions:

- (a) Designs and develops a national framework for academic benchmarking such as a National Qualification Framework (NQF);
- (b) Set minimum quality assurance standards;
- (c) Evaluates and reviews the operations of an institution or its programmes to ascertain the level of compliance with the set minimum standards; and
- (d) Accredite institutions and or individual programmes.

Each institution of higher learning should develop internal policies and mechanisms that it uses to ensure that its teaching staff design programmes whose expected outcomes and credit weighting procedures meet the general expectations set in the NQF. Throughout the world regulatory bodies such as ZIMCHE develop threshold standards based on best practices or minimum accreditation standards. We shall elaborate on the key elements of these standards in another section. As part of the accreditation process ZIMCHE should act as overseers to ensure that standards are maintained through self-evaluation and peer-review processes.

Programme Design Model

The challenge that universities, the world over, face in the 21st century is to design effective programmes and courses. An effective programme or course is that which answers the questions: whose need is the programme serving and what learning outcomes/competences is the programme expected to achieve?

Donohue (2012, p. 26) argues that “clearly identifying the educational needs of a target audience of learners is an important first step in the design process, since this will shape both the curriculum content as well as delivery modes.” In response to the second question, Mashiri (2013) says that an effective academic programme is not simply a series of courses linked by a commonality of subject matter. An effective programme is one that is designed to achieve specific educational needs.

To achieve these thresholds of programme design, non-traditional approaches must be adopted. “A non-traditional approach is one that conforms to a quality assurance framework that stresses a cyclic relationship of planning, implementation, evaluation and assessment and review (feedback and procedures for change)” (Kadhila, 2013, p. 197). The planning process includes an environmental scan that conducts an internal and external SWOT analysis. The scan stimulates dialogue with various stakeholders and members of the academic community. The dialogue is guided by the institution’s overall mission and strategic goals so that the intended outcomes of the programmes are consistent with the vision and strategic objectives of the faculty or department offering the programme. Programme design should also be sensitive to market/employer requirements and to national, regional and international circumstances and needs and comparable to similar or equivalent programmes offered by recognised institutions.

Availability or unavailability of resources will determine an institution’s programme outlook and programme priorities. For example, the availability of efficient internet connectivity at some of the universities in the country should facilitate the ability to design programmes that involve online education as this approach overcomes barriers of time and space and allow flexibility in the times and places students engage in learning experiences. Of course this poses a challenge on credit weighting based on the credit hour system. The credit hour system normally measures and account for learning experience that occurs in a class, laboratory or studio. Yet, in online education “student and instructor are not in the same place, thus instruction may be synchronous or asynchronous, and learning may involve communication through the use of video, audio or computer technologies” (Parsad, Lewis & Tice, 2008, p. 1).

Programme design must take into account the budget process, especially the amount of resources available or are allocated to implement the programme. Where an institution is dogged by resource constraints, as is currently the problem with most local institutions, rationalisation becomes critical. The University of Zimbabwe, for example, has done this very well. For instance, a number of programmes in the faculties of Arts, Agriculture and Engineering have courses that expose students to basic skills in geographical information systems and remote sensing technology. Instead of each faculty mounting its own course resulting in

the institution thinly spreading the little resources across the individual faculties, all resources are allocated to the department of Geography and Environmental Science that has the best human and intellectual capacity to design and administer an inclusive course, to establish what has become a national and regional centre of excellence in Geographical Information and Remote Sensing technology.

Keeping with the 21st century student in mind, programme and course design requires candor, clear thinking and ability to examine and often contest well-engrained habits and assumptions about teaching and learning (Donohue 2012). It challenges individuals to expand their horizons, critically evaluate subject matter, and generate new and creative approaches to learning. In order to achieve quality programme and course design, an institution of higher learning should have a clear human resources policy deriving from an overarching national policy. This is critical since a university is only as good as its teaching (and research) staff. They are the heart (and soul) of the institution that designs its programmes, produces its graduates, its research products and its service to the institution, community and the nation (Banji, 2011). Programmes should be designed and administered by high calibre, experienced and competent staff, evidenced by the qualifications and research output or experience. The current policy that is in practice at the University of Zimbabwe is that except for those teaching in a programme leading to the highest qualification in the discipline, at least 90% of the teaching staff should hold a qualification higher than the exit level of the programme. However, to attain a world class university status, a university should have ninety percent (90%) of its teaching staff holding doctoral degrees and at professorial grade.

ZIMCHE should develop mechanisms for enforcing minimum standards as part of the accreditation, assessment and review processes. Therefore all institutions, from inception must design and implement various internal activities to conform to agreed standards of programme design. Institutional internal mechanisms that reflect a commitment to quality programme and course design. One way of ensuring quality control is to provide a standard format for programme and course presentation. Most institutions for higher education use the traditional approaches to programme and course design that often use an idiosyncratic approach to formatting. A standardised format is transparent as programme components and requirements are clearly articulated. Hence, it is easy to navigate, especially for the 21st century student who is focused on learning outcomes. New teaching staff and part-time lecturers interpret programme components and course elements more straightforwardly.

Programme design procedures should predict the implementation process. The implementation process clearly spells out how the programme/course goals and

objectives will be achieved. Thus, at that stage, teaching and learning approaches best suited for a programme and context should be considered. For, example, assume teaching methodologies appropriate for large classes in the Humanities and predict how teaching staff can balance the challenges of managing inadequate resources, maintaining standards and the delivery of high quality learning in the discipline.

At various stages of implementation, programmes need to be monitored and evaluated by both internal and external stakeholders (e.g. students, peers, external examiners, alumni, etc.). It is at the programme design stage where the cycle of evaluation and review processes is decided. There should be scope for formal and informal review. Formal reviews would be made on the basis of a national Standards and Guidelines for Quality Assurance in Zimbabwean Higher Education sector. In the absence of such a framework, institutions will insist on faculties and departments effecting informal processes such as student feedback, employment/continuing study rates, external examiners' reports, peer review and alumni feedback.

Key Elements of Programme Design

It has already been mentioned that accreditation enhances quality assurance. At programme level, an accreditation policy will require that programmes will have formal statements of expected learning outcomes. Expected learning outcomes provide useful guide to the establishment and assessment of study plans, making it easier to determine whether the programmer's purposes are fulfilled (Banji 2011). Intended exit level competencies of those who complete the programme should be clearly articulated. Delivery modalities and assessment rubric should be taken into account to achieve set learning outcomes. Research by the American department of education found out that "classes with online learning (whether taught completely online or blended) on average produce stronger student learning outcomes than do classes with solely face-to-face interaction" (Donohue, 2012, p. 13). The development of assessment rubric will guide teaching staff in assessing student learning. An effective and dynamic programme should be based on an educational philosophy that supports an active learning approach. This approach promotes the idea of a student as an autonomous learner and the lecturer as a facilitator through the design of effective scaffolded self-directed or task-based learning opportunities (Grave & Braaten, 1996).

Successful programme design is reflected at course level. This is where the 'art' of teaching is blended with the science of course design. Thus, it is extremely important to maintain focus on the purpose of the course, student activities and assessment. The learning outcomes embedded within each course should be appro-

priate at the course level and the standard Bloom's taxonomy can be used as a useful guide. Programme designing should ensure that courses/modules are logically connected to allow for progression in knowledge development.

Programme design must show a balance of theoretical, practical, problem solving and experiential skills and should be in line with requirements of specific disciplines and purpose of the programme. Where possible, programme/ course content should align with professional practice and shows potential to develop the required capacity and competencies in line with national and market needs.

Credit Weighting

Most universities in the country are either using some form of credit system or are considering adopting one. All these developments are taking place in the absence of a National Qualification Framework (NQF). While the Southern African Development Community (SADC) is developing a regional Qualifications Framework, some countries such as South Africa and Lesotho have already developed their QFs since the structure of such frameworks varies considerably from country to country. As Hart (2005, cited in Tuck 2007) rightly observes, some NQFs include a credit system, some do not. Some of those that do, provide only for credit accumulation, others for credit transfer, and some for credit accumulation and transfer (CAT). The ideal thing would be to have a NQF to integrate a CAT system. The CAT system will provide a framework for transfer of credits. On the one hand, Credit accumulation takes place within an institution and is generally automatic. On the other hand, transfer is between institutions. It is not automatic but negotiated. However, credit accumulated in one institution may have been transferred from another institution (Tuck 2007).

Credit measures the volume of learning required to fulfil degree programme requirements and credit weight is the relative value assigned to a course. It is usually expressed as a numerical value linked to contact or notional learning time. Tuck (2007, p. 57) says:

Putting a credit value on a programme of learning allows stakeholders to describe and compare the volume of learning undertaken in completing the programme. Credit systems depend on the assumption that is possible to identify the learning outcomes of a programme, to place these outcomes at a level and to give them a weighting.

An institution will have to decide on which system to use. The American system uses the credit hour system where a weight of one credit hour normally means that a course meets for lectures one hour per week for the duration of a semester. In the European system (ECTS), the credit numerical value is linked to notional time. Many systems work on the basis of one credit point representing the learn-

ing outcomes achieved through a notional ten (10) hours of the learning outcomes. In terms of weight, a one (1.0) credit course carries twice the weight of a 0.5 credit course and normally consists of three contact hours per week over a period of 15 weeks. An institution's instructional policy should articulate how credit weighting is assigned for courses offered in different formats. For example:

Conventional class:	1 credit = 10 hours
Laboratory:	1 credit = 25-40 hours
Seminar:	1 credit = 25-40 hours
Clinical:	1 credit = 45 hours
Practicum:	1 credit = 45 hours
Fieldwork:	1 credit = 60 hours
Placement	1 credit = 60 hours

Credit is awarded for passed courses only and no portions of credit are assigned to a course. If a course is delivered in a conventional way, the number of hours taken to deliver the course content in one semester normally determines the academic credit.

An institution of higher learning will need to provide guidelines that specify how substitute and equivalent course are weighted. Normally, no credit may be earned for auditing courses and credit hours earned in courses taken on a pass/fail basis should not be included in calculating GPA.

Stage Weighting

Individual institutional guidelines will clearly specify credit weighting on the basis on learning stages or levels. In the current University of Zimbabwe General Regulations, for example, the marks achieved for stage 1 (Level 1) do not count towards degree classification. For three year undergraduate programmes, only the second and third stages contribute to the final weighted marks on a 1:1 proportion. The problem is that there is no discrimination on credit weighting on the basis of stages. Ideally, higher level courses should weigh more than lower level courses such that the combined average of the second and third stages should be weighted 1: 2 or 2: 3.

Establishing the Credit Rating Process

Within an institution, stakeholders should agree on the amount of learning time that is required to complete the learning outcomes of a programme or course. Where a new programme is being designed, this process is done from scratch. In the case of an existing programme this can be done through experience or comparison with well-established and previously credit-rated programme (Tuck 2007). When deciding the credit rating at any stage, the following questions should be

addressed: When the programme was designed, what type of learner was it intended for, with what kind of prior knowledge and experience and with a view of what kind of progression? What kind of content was envisaged? What would the learner already know or be able to do, what would be new and what would require more instruction/practice on? What kind of learning activities would be required (including assessment)? Where prior knowledge was acquired through relevant practical experience, internal mechanisms for credit rating will provide for how years of practical experience can be converted into university credits.

Since one of the critical functions of the credit system is to promote student mobility through transfer of credits, the Zimbabwe Council for Higher Education should provide benchmarks which individual institutions use for determining credit equivalences or for negotiating transfers. However, there must be scope for institutions involved in the transfers to compare content and learning outcomes.

Lessons from the Region

ZIMCHE could immensely benefit from sub-regional and or regional collaboration and networking on the management of QA in higher education. SADC recognises the need for sub-regional collaboration but, “difficulties exist in turning this recognition into effective mechanisms for mutual assistance” (Materu, 2007, p. xviii). The major constraints faced by ZIMCHE and perhaps by most of the QA agencies in the region, are to do with inadequate funding and trained, credible and experienced professional staff to manage the QA process. Sub-regional networking would facilitate and accelerate the diffusion of skills. For example, the National Council for Higher Education (NCHE) in Namibia developed a framework for best practices. The framework is intended “to bring structure to the systems to which it is applied, as well as assist higher education institutions to organise their quality assurance systems and processes in a systematic manner” (Kadhila et al, p. 188). Zimbabwe could draw lessons from Namibia’s experience in this regard.

Although individual institutions involve professional associations in their internal quality assurance processes and reviews, ZIMCHE does not have a framework that defines how professional associations participate in its accreditation activities. In this regard, there is room to learn from Tanzania and South Africa. In Tanzania, professional associations participate in accreditation panels set by the national agency and South Africa created statutory professional bodies specifically for quality assurance (see Materu, 2007, p. 40). In fact, although the state of higher education differ significantly from one SADC country to another, regional collaboration, argues Materu (2007, p. 39), “could be a powerful vehicle to achieve economies of scale since some of the countries are too small or have too little

capacity to sustain an effective quality assurance system on their own". Moreover, ZIMCHE can take advantage of the preponderance of cross-border education between Zimbabwe and South Africa (although the process is still largely one way) to learn from the South African Higher Education Quality Committee's (HEQC) experience through the SADC Protocol on Education and Training .

Conclusion

Programme design is an internal educational activity, subject to external audit and review that provides an institution of higher learning an opportunity to guarantee quality and customer satisfaction. Internal mechanism should be put into place to validate that the purposes of the programmes are in line with the institution's mission statement as well and faculty or department mission and goals. The institution's policy must clearly express rules for programme design, implementation, evaluation and review, including the involvement of all stakeholders. It is important that the content and outcomes of the programme match its purpose and that the content is up-to date. The expected learning outcomes should be clearly formulated, coherent since these, together with the learning activities and the student workload will be the basis for credit weighting and credit rating. Although individual institutions can develop their own credit systems, implementation, including accumulation and transfer, is most effective in the context of a NQF which Zimbabwe will, hopefully, soon develop. There is scope to learn from the Bologna process but perhaps, closer home, the South African experience in the context of the SADC Protocol on Education and Training.

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