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The purpose of the *Kuveza neKuumba - Zimbabwe Ezekiel Guti University Journal of Design, Innovative Thinking and Practice is* to provide a forum for design and innovative solutions to daily challenges in communities.

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Wakadzidzei, Wakadzidzepi, Wakadzidziswa Nani? Reconceptualising 21st Century University Education in Zimbabwe through Modular Learning Approach

ANGELA MUNJANGA[1]

Abstract

The questions Wakadzidzei? Wakadzidzepi? Wakadzidziswa nani? are critical and essentially influence the activities and focus of many education systems. The introduction of modular learning not only facilitated education following the novel COVID-19, but also answers these critical questions on what should matter at the end of any education, what skills and demonstratable knowledge a learner acquired through education, where he/she studied or who taught him/her. This qualitative research examines existing literature on modularisation in a bid to demonstrate the implications of the approach and how it should ideally be implemented vis-à-vis current practice as established through discussions with educators from different universities in Zimbabwe. Literature reveals that the goal of modularisation is theory-practice integration through the impartation of relevant skills and knowledge. The article concludes that challenges, including time constraints, lack of skills and sufficient knowledge among educators on teaching in modular instruction, render the educator poorly equipped for this approach and, in turn, render modularisation ineffective. When effectively and correctly implemented, the question Wakadzidzei? should be the main concern for all education stakeholders as opposed to individual institutions or educators.

Keywords: Modular instruction, semesterisation, linear degree, assessment, education 5.0, theory-practice integration

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INTRODUCTION

The 21st-century hyper-industrial community demands apractical and relevant education. Products of any education system should be able to fit in seamlessly and without unnecessary hiccups within the economic spectrum, be it as employees or employers. This requirement has absolutely nothing to do with who taught the individual or where they attained their degree but, rather, centres on what they attained during the process of university education in terms of theoretical and practical knowledge. Previously, university education focused primarily on equipping students with theoretical knowledge through lecture-teaching methods over a whole period of two or three years, depending on the programme, thus creating a yawning gap between educational products and industrial demands. As a result, upon completion of a university degree, graduates often found themselves forced to go through the process of learning all over again to link the gained theory with the practical skills required in the industry. The reality of the matter is that, upon graduation from any university, the most important quality required from the product of education is a demonstration of acquired knowledge and skills through practice (what they have learnt) rather than an expose of where they learnt or who taught them.

Wide literature exists on the importance of learner-centredness in education at all levels, including university, yet the issue of institution prestige still takes centre stage when it comes to choosing schools to attend or, in some cases, even employment opportunities, at the expense of demonstratable learner capabilities. Many universities may have adopted the modularisation approach but there is still a lot to be understood in terms of its implications for both teaching and learning and particularly its role in theory-practice integration. It is thus the intention of this article to examine the recently adopted modularisation approach to university education, and its implications and to establish how it bridges the gap between theory and practice, education and industry, in an environment where the focus of learning outcomes has shifted from content to competence (Botma *et al.*, 2015). The article also seeks to demonstrate how modularisation enables the appropriation of validation onto learners' demonstratable skills and knowledge

after a university qualification, rather than on individual educators or institution prestige.

CONCEPTUAL FRAMEWORK

Effective implementation of modularisation as an approach in tertiary education is measured by demonstrated student successful knowledge and skills acquisition following combined institutional, faculty member and student effort. These efforts combine seamlessly to ensure that graduating students stand equal opportunities for employment in the industry or abilities to create employment for themselves and others. Universities provide, or ensure the provision of, competitive degree programmes in conducive teaching and learning environments which affords both educators and students access to vocational and theoretical knowledge and skillsets. Educators facilitate and stimulate learning through the development of tasks that foster individual or group learning. Students, on the other hand, make use of all available human and material resources to acquire knowledge and skills to make themselves relevant in the industry for both personal and community development. These combined efforts ensure that the learner is at the heart of the education process and the end of the course, the learner and his/her demonstratable knowledge and skills, and not the teacher or institution, is the focus of all relevant attention.

LITERATURE REVIEW

WAKADZIDZEYI?/WHAT KNOWLEDGE AND SKILLS DO YOU HAVE?

Sule *et al.* (2020:37) argue that "education without fortified institution and quality personnel for teaching become a skeletal frame". Effective education requires three key players, namely the learner, the educator and the institution. Whatever efforts may be contributed by each of these players, though they will benefit, each of them, in one way or the other, the goal is mainly to ensure the full development of only one, the learner. This explains the recent intense waves of lobbying for learner-centred approaches to education at all levels from pre-primary to tertiary and centres of life-long learning (Chigbu and Nekhwevha, 2022). Hargrave (2022.) notes that "many critics within academia, as well as the "real world" of business, [argue that] almost any type of rating misses the point. What's more

important than a school's prestige, they argue, is the effort a student puts into their time there". Hargrave (*ibid.*) further argues that "students at any school who play an active role in the process and take full advantage of the opportunities those four years can provide, have a leg up on those whose best effort ends at acceptance" . Students capitalising on such opportunities as that afforded by learner-centred approaches to education, should benefit from their efforts regardless of the rank or reputation of the institution they attended. At the end of a course or level, a learner should demonstrate knowledge and skills acquisition appropriated at that particular level. Human capital matters more than the institutional prestige of educator expertise or popularity.

***WAKADZIDZEPI?*/WHERE DID YOU ATTAIN YOUR DEGREE?**

This question is often posed in many situations to graduates from institutions of higher learning and is often intentionally or unintentionally used discriminatingly. While the importance of learning institutions cannot be denied and their crucial role in the development of an individual cannot go unconsidered, this can and should not be the determining factor when it comes to the employability of an individual. Employers, according to Chigbu and Nekhwevha (2022), need skilled and credentialed graduates and institutions of higher learning (universities) are the providers of both the skills and credentials sought by employers. Sule *et al.* (2020:37) point out that:

> a good institution is a true reflection of the good environment which reinforces the effort of the academic staff and learners by providing effective teachings, the teaching of research and community services to enhance a kind of learning that will aid undergraduates: with employability skills.

Once the individual demonstrates employability skills, that is the most important quality the employer or community should focus on. However, the demands of the labour market, as a result of globalisation, lead to increased competition amongst universities which, in turn, leads to issues of prestige and institutional reputation taking centre stage over graduates' demonstratable skills.

In an investigation on the impact of university reputation on employment opportunities in Bolivia, Nogales, Córdova, and Urquidi (2020) concluded that there is a large university

reputation premium where applicants from well-valued universities are more likely to receive positive responses from employers as compared to unpopular university applicants. For instance, a law graduate from the University of Zimbabwe (UZ) would more likely receive a positive response to an application than one from Zimbabwe Ezekiel Guti University (ZEGU). A Harvard graduate would be more likely to be readily acknowledged as knowledgeable compared to a graduate from a university in a developing country. Such decisions, either by employers or communities, in most cases, are made without due consideration of the applicants' demonstration of skills and knowledge, but taken at face value due to the influence of institutional reputation.

***WAKADZIDZISWA NANI?*/WHO TAUGHT YOU?**

In other cases, association with prominent faculty members can influence one's fate in terms of access to opportunities. A blog post by Staffaroni (2017) states that, "If you're planning on pursuing positions in your field after graduation, then studying at a school with a good reputation in your specific field (and with a professor who is highly regarded) is essential". In some cases, as highlighted above, some people get ahead in life, not because of what they know or the skills they have demonstrated, but simply because the employer is confident in an educator's skills and knowledge. Some people tend to assume that if an individual passes through the mentorship of an expert within a particular field, that means that the incumbent automatically possesses similar skills and knowledge. This is not necessarily the case because teaching may occur and yet learning never transpires. Thus, to acknowledge an individual as knowledgeable simply because of some association or having passed through the hands of a knowledgeable another, is wrong. Gage (1963:5, cited in Rajagopalan, 2019), observes that observes that, **"**teaching is a form of interpersonal influence aimed at changing the behaviour potential of another person". Judging from the numerous debates and calls to shift from teacher-centred learning approaches, to those that are learner-centred; the arguments arise from the backdrop that teaching does not automatically mean learning. One can be taught and yet emerge on the other end having learnt nothing.

DEFINING MODULARISATION

Modularisation, as a concept, is not necessarily a new phenomenon (Cornford, 1997), even though it has become mainstream in Zimbabwean university education only recently with the advent of the COVID-19 pandemic. Literature on modularisation in institutions of higher learning dates back to the 1970s such as Goldschmid and Goldschmid (1972), who review the principles, implementation, management, formats, problems and research in modular instruction. Modularisation is rater a popular practice in various industries such as construction. For the manufacturing industry, modularisation is an invaluable strategy for the achievement of mass customisation which is opposed to the more common practice of mass production. Mass customisation is whereby products and services are tailored for specific customer needs, while mass production is product-centred (Ezzat *et al.*, 2019). The argument thus posited by proponents of modularisation is that higher-level learning institutions, as service providers, should be focused on the mass customisation of services offered as opposed to the traditional mass production of graduates at the end of their programmes or four-year programmes.

Various schools of thought define modularisation as the approach to teaching which involves dividing the curriculum into small discrete modules or units that are independent, nonsequential, and typically short in duration (Dejene, 2019). Cornford (1997:238) argues that:

> "modularisation of courses involves the packaging of course content, either theory or practical, into shorter, logically self-contained units which together cover the content which would be covered by a conventional, longer course".

Concurring, Goldschmid and Goldschmid (2015) submitt that modules cover less content. What defines small, however, is left to the discretion of each institution or each module designer, thereby leading to inconsistencies.

The emphasis of modularisation is that the industry should concentrate on learner-acquired knowledge and skills (*wakadzidzei),* rather than where you studied (*wakadzidzepi*?) or who taught you? (*wakadzidziswa nani?).* As Ekene and Oluoch-Suleh (2015) point out, any education should bring

about change within the individual which promotes greater productivity and work efficiency, which then ensures self-sustainability. This can be possible only where "education for sustainable development is seen as a process of equipping learners with the right understanding and knowledge, skills and abilities required to work and survive in a way that safeguards the environment and the socioeconomic well-being, both in the present and future generation" (*ibid.*:92). The relevance of modularisation, as Dejene (2019) puts across, is that it is an outcome-based approach to education, whereby the teacher gives the same information as would or intended to be given during lecturing, but does it through a written series of information/tasks which students then work on and produce results as evidence of acquired knowledge. Materials or tasks given to learners are designed and packaged in such a manner that a student or students working either individually or in groups may use them without the direct assistance of the educator (Wimmer, 1991; Lebrun, 2001; Betlen, 2021), thereby promoting active learning (Chigbu, and Nekhwevha, 2022).

Scholars further posit that in this approach to knowledge and skills acquisition (modularisation), students are presented with a variety of possible situations designed not only to equip them to cope in class or other academic environments but also to prepare them to deal with the realities of the unpredictable future after college (Lebrun 2001; Valencia, 2020). This unpredictable future does not take into cognisance the graduate's tutorship nor the institution they hail from, but would demand a demonstration of acquired knowledge and skillsets. Economic, organisational and graduate needs must be unified to engineer impeccable inclusive development. Thus, opportunities afforded by institutions must be uniformly developed to advance lifelong learning by combining university and vocational curricula and post-compulsory learning and training systems into a unified system (Raffe, 2003; Chigbu and Nekhwevha, 2022). Where this unification exists, the result is enabling the focus to be placed on the graduate as the relevant object and not the prestige of a degree-awarding institution or individual educators. Achievement of this result is the goal of a modularisation approach to university education.

The strength of modularisation in Loveland's (1999) view, lies in that, process takes precedence over content. Dejene (2019) adds that modularity enables the design of the curriculum to meet students' needs, thus moving the curriculum from the supply side (what universities want to deliver) to the demand side (what students and their employers identify as what they want). The goal of the university is to reduce skills shortage through the production of skilled manpower, relevant to the needs of the labour market, hence universities tailor their programmes towards equipping students with skills, especially the ones that aid in securing jobs for themselves or enable them to employ others (Sule *et al.*, 2020). Modular instruction meets the needs of students more adequately than traditional instruction both in terms of the quality of learning and the content. As the role of the educator changes from lecturer to facilitator, autonomy is thus given to the learner to take charge of their learning, while the teacher provides guidance. Furthermore, the relationship between content and its impartation or acquisition by students is complementary, with more significance being given to the how and the what of knowledge acquisition. This is what then bridges the yawning gap between individual universities (*wakadzidzepi*?) or individual educators *(wakadzidziswa nani?)* thus for the incumbent exiting from the education system rather than the institution they studied with to be the centre of the whole system.

MODULARISATION IMPLEMENTATION AND DIFFERENCES

As argued by Martin (n.d),

> the target of modularisation is to create a flexible system that enables the creation of different requested configurations, while also reducing the number of unique building blocks (module variants) needed to do so.

For instance, taking a degree programme like Social Work as the product can then be subdivided in such a manner that it has several entry and exit points. Instead of waiting for four years for one to use the product, that is when a person finally graduates with an Honours in Social Work, they can take a few courses for instance. which would be strategically grouped to meet specific objectives such as the attainment of a certificate. One can even start working using that particular certificate funds and time permitting. Some who take up degree

programmes are working already and may require only certain knowledge offered within the particular degree programme.

The idea being emphasised through modularisation is that instead of having to take up to four years to complete the studies, products within the education system can then take it in bits and pieces at their convenience. After studying for some time, graduating with a certain qualification and taking a gap, the individual can then choose to re-join the programme and, instead of beginning from level one, which would already have been covered, they pick up from where they left off, develop the certificate further into a diploma or another qualification and then exit only to return at a later stage to attain the full degree. This way, the whole degree is then a product of multiple breakable units which can be attained at the convenience of the learner. Thus, at the end of the day, instead of coming up with a separate qualification called Diploma in Social Work, for instance, modularisation allows learners to take up several courses and then exit from the system with that same diploma qualification.

The hierarchical modular system, for instance, as has been exemplified above, is one way that universities can adopt to tailor-make degree programmes for the needs of the customer and industry.

> Shorter, self-contained units lend themselves to advantages in terms of scheduling, choice of modules to satisfy the training needs of individuals and individual employers, and review of courses to ensure technological currency" (Cornford, 1997:239).

As Martin (online) rightly defines, "a modular system is a collection of building blocks that can be configured in different ways, adapting to different customer needs". This enables institutions to use the same available resources for several qualifications, while also making education cost-effective for learners. When a new independent qualification is introduced, it means an increase in the number of employees or an increase in the workload for the existing human resources if the institution is incapacitated to hire more manpower. Whereas, with the implementation of modularisation, the very same people taking up modules for a degree programme maintain their workload and yet achieve more.

As French (2015) suggests, university education in the past comprised linear degree programmes made up of subjects which at some point, were taught over a year and the examinations for the course would be taken once at the end of the academic year. With the introduction of semesterisation, the one-year course was then broken down into two separate but related courses. For example, where Bible Knowledge was a one-part course, it was broken into two for Old Testament in one semester and New Testament in another. Modularised degrees, on the other hand, tend to be made up of stand-alone, independent units that can be undertaken in a different order and accumulated at different speeds. While semesterisation dealt with modules, there was some level of interdependency between modules. In some cases, some modules were prerequisites, whereby for one to proceed to another level, they would have completed another module in the previous semester. Modularisation, however, is associated with the notion of delivering knowledge in "bite-sized" pieces and, therefore, lends itself to time-shortened and intensive modes of delivery (Kamakshi, 2011; French, 2015; Dejene, 2019) and these units are delivered independently of each other.

In the modular approach, all capabilities required to perform in a given field, which are closely related, are then designed into sets of tasks which then are and grouped. For instance, capabilities required for the management of institutional finances, which may include generation of finances, allocation, accounting and monitoring, can be grouped and form a module called financial management (Goldschmidt and Goldschmidt, 1973; Sejpal, 2013). Learners then have to gain both theoretical and practical understanding of these capabilities through research, innovative strategies and practice which makes the core of Education 5.0. Many arguments on educational approaches emphasise child-centred learning and nothing observed that it is more than modularisation of and in education. Modular design gives greater student autonomy in constructing the programmes and a greater range of entry gates and exit points (Ali *et al.*, 2010) and enables the learner to have control over and be responsible for his/her learning. It does demand greater maturity on the part of the learner the moment

they enter the university system and this too is a requirement for the industry.

METHODOLOGY

This qualitative research adopted the constructivist worldview of education, where the educator is the facilitator of learning. An extensive review of existing literature on modularisation and its implementation at the university level globally was conducted.

FINDINGS

CURRENT PRACTICE

Modularisation involves the reduction of teaching and learning time for each module. This, however, should tally with the module content. The change from year courses to semesterisation meant the reduction of course content. Similarly, the implementation of modularisation implies a reduction of content to match the reduced time assigned for each unit. This explains the different formats/approaches adopted by different universities in Zimbabwe as outlined here. The introduction of this new approach has met with mixed feelings among faculty, students and other stakeholders. This attitude towards change is, however, not new. When semesterisation was introduced at the UZ in the 1990s, the then Minister of Education, Dr Ignatius Chombo and the UZ Vice-Chancellor, Professor Graham Hill, expressed what the media considered "unqualified faith in semesterisation as the key to 'revitalising' the University of Zimbabwe". While this new approach has been adopted by many universities in the country, the implementation differs from one institution to another, which leaves a lot to be desired as far as understanding of this approach is concerned. Modularisation in Zimbabwe seems to mean compartmentalisation of the semester to allow lecturers opportunities to meet other demands of Education 5.0. The following is a brief outline of the implementation of modularisation at some of the local universities.

THE ZIMBABWE EZEKIEL GUTI UNIVERSITY PRACTICE

Programmes at ZEGU have five modules per semester and within each semester there are two examination seatings. Thus,

the semester is broken down into five two-week blocks, whereby each module is allocated two weeks of teaching and learning, lecturer/facilitator ensuring yhat learners acquire knowledge and skills for the particular course/module. The first fortnight is set aside for university-wide courses, if any, within that semester, the second fortnight constitutes faculty-wide courses and learners take up examinatio for those two modules studied. After a one-week semester break, the university opens with a fortnight allocated to department-wide courses. Either during this first week or the last fortnight block, two modules will share the teaching and learning period. The last examination seating is held after the last fortnight block. Ideally, it is within this fortnight that the educator has to impart all the skills required and facilitates that learners acquire these skills through diverse strategies employed or tasks given to learners. The examination at the end of the block is also meant to assess learners' acquisition of skills and measure their competence at the end of each learning area. The idea behind ZEGU's choice of implementation of modularisation is to allow educators more time to engage in all the Education 5.0 missions, which are teaching, research, industrialisation, innovation and community engagement.

CHINHOYI UNIVERSITY OF TECHNOLOGY– UNIVERSITY OF ZIMBABWE PRACTICE

The two institutions (CUT and the UZ) use similar approaches to modularisation implementation. Each programme has four modules per semester and each module is allocated three weeks of teaching and learning time, a one-week study and examination preparation and examinations after that. What this means is that within each semester, there are four examination sittings.

THE MIDLANDS STATE UNIVERSITY PRACTICE

The Midlands State University (MSU), just like ZEGU, adopted dual compartmentalisation approach whereby there are two quarters per semester. Each programme has six modules and students will complete half of the modules in the first quarter, take examinations for the completed modules, then complete the remaining modules in the last quarter. With MSU, lecturers, unlike at ZEGU, can have classes throughout the semester, that

is, have classes in both segments of the semester, whereas ZEGU encourages educators' engagement with learners in one of the two segments to allow them to work on other missions.

ASSESSMENT IMPLICATIONS IN MODULAR LEARNING

With the constructivist approach, the educator becomes a facilitator of learning. For this reason, the responsibility of the educator-facilitator is to create learning opportunities for students to process new information and link it to existing mental frameworks through individual or social activity (Botma, 2015). The educator ceases the traditional role of being the ultimate source of all knowledge but only guides as the student seeks knowledge on their own. This means, through the use of module guides and other prepared course materials and frequent objective feedback at multiple levels, the teacher continuously gives students direction towards knowledge and skills acquisition, maximising potential and identifying opportunities.

Assessment methods in the modular programme should be under the learning outcomes of the module and should foster a deep approach to learning. Educators ought to be critical to avoid either under- or over-assessing students, based on the unit of study. Sadiq and Zamir (2014:105) concur that:

> even very good-designed modules, with very well-defined learning outcomes, can fail if the edification strategies employed are infelicitous to inspirit and support the learners towards meeting the desired learning outcomes.

In cases where the class sizes are too big, there is need to devise assessment strategies that ensure that all learners get sufficient objective and constructive feedback, otherwise the whole purpose of both assessment and the system would be defeated. Assessment is key to the effective attainment of educational goals, especially in this modular programme.

The major affordance of modularisation is that it frees the facilitator from both lecture preparation and many routine administrative tasks, thereby creating time to focus on the deficiencies of individual students without involving the whole group with each problem. Where properly implemented,

modularisation enables educators to concentrate on the process of learning which is often an exciting and scholarly activity.

Goldschmid and Goldschmid (1973) recommend that when designing a module, there are different steps to follow to attain educational goals. The steps include identifying the subject matter to be taught, establishing rationale, defining objective and evaluation items, designing units and selecting study materials. Any facilitator/educator has the mandate to prepare for teaching just as learners prepare for learning. One has to establish what they want to cover that is in line with the curriculum. If modularisation is to be truthfully adopted, the module content should be related to other units that learners are to cover within each given period. This means one has to provide a statement of rationale that aligns the module with the rest of the broad spectrum of things. In the absence of meaningful rationale, teaching would be haphazard.

After the identification of the subject matter and rationale, the definition of a set of objectives and evaluation items then follows. A decision should be made on the hierarchy of the objectives and sequence of instruction. Modularisation instruction regulates that students should self-teach and the provision of adequate tools is mandatory for learners to self/peer teach. This allows the educator free space to prepare and carry out other responsibilities such as community engagement, industrialisation, research and innovation. The development of pre-tests and post-tests enables learners to evaluate their learning. During the pre-test, learners can establish their existing knowledge and during post-test activities, they demonstrate the acquisition of new knowledge.

CRITERIA FOR MODULARISATION IN UNIVERSITY EDUCATION

For modularisation to be effective, some steps ought to be followed.

BOTMA ET AL., FOUR STEPS TO THEORY - PRACTICE INTEGRATION

Botma *et al.* (2015) identified that to achieve sound integration between theory and practice in education, following the steps from activation of existing knowledge to engagement with new information, demonstration of competence, and application in

real-world practice is critical. This may be quite the most basic approach to productive learning in the context of modularisation. The first step borrows from the idea that learners are not necessarily empty vessels but they possess some knowledge. The educator must establish first what learners already know about the topic by way of activating their existing knowledge through the use of diverse strategies. From then, learners can engage with new information which probably is what the course demands of the learners. Through a variety of tasks, learners demonstrate competence. For example, the use of dramatisation, writing up memos and conducting simulations, are all ways that English for Professional Purposes students can use to demonstrate competence following engagement with new information acquired in the module. When they finally draft application letters for attachment, create marketable resumes and attend interviews to apply for internships or any other jobs, that becomes the last step of application of knowledge and skills in real-world situations.

DISCUSSION

Modularisation, if properly and correctly implemented, is unarguably the best way to go to meet the practical mandate of faculty, the needs of students and. in turn; the industry. Ideally, modules are independent single-topic units that may be used intact in different courses. thereby eliminating redundancy within and between departments thus decreasing staff preparation time (Goldschmid and Goldschmid, 1973). However, understanding the principles of implementation is still a major challenge for both faculty and students. There is the issue of limited time, students have to carry out tasks in a manner that is meaningful and efficient. Taking, for instance, institutions where each module is allocated a fortnight block, the educator has to introduce the module and then assign tasks that require students to engage with the community, demonstrate innovation, industrialise and learn. The practicality of this being completed within a fortnight is rather far-fetched. As such, effective implementation of modularisation becomes impossible or unreal.

As it is, while many universities have adopted this *modus operandi*, there is limited understanding as to what it entails.

Each institution reserves the right to implement this system in its unique way. However, the irregularities in implementation in different universities in Zimbabwe are suggestive of the fact that there is limited understanding as to what modularisation entails. As argued by French (2015: 1), in institutions of higher learning. where "credit-based modular curriculum structures" were put in place, the idea was, and still is, "an attempt to cater [for] the needs of more diverse student groups and to allow students greater flexibility and choice in managing their studies". Where this does not happen, suffice to observe that modularisation either has been wrongly implemented or has not been implemented at all. Learners are still restricted within the confines of the rigid system with no multiple exits and entry points. The system is still focused on what faculty wants and not what students need in terms of what knowledge and skills they acquire at which point. For example, a student pursuing an honours degree in Social Work has to meet the demands of that programme as prescribed by the educator/facilitator, the skills they acquire are in line with mandates set by the facilitator.

The goal of modularisation points to classrooms that are "centres of intellectual inquiry", where students form ideas, take risks, make mistakes, critically think, fix mistakes and learn how to solve problems from those mistakes (Ali *et al.*, 2010). Within each module/unit, students should be able to engage in and demonstrate these critical skills which then make them relate to industrial experience. In an English for Professional Purposes class, for instance, whose goal is to prepare learners and equip them with practical skills for work-related learning, tasks should include learners researching intercultural challenges encountered in the workspace. This requires them to visit organisations in their different fields and this also requires time. Students can then role play some of their findings by way of creating and solving problems during feedback. Teaching-learning, particularly at university, is no longer a one-sided teacher-to-students interaction but is rather multidirectional. Students, in the process of learning in modularisation, interact with teachers, peers, parents, and, importantly, professionals outside of the school building to seek and understand their learning (Martin, 1997; Ali *et al.*, 2010). This enables theory-

practice integration, thereby closing the gap between school and industry. However, if this is at all the heart of modularisation, one would then wonder how current practice at local universities is achieving this, given the constricted teaching and learning time adopted in what is now called modularisation.

The idea of making the curriculum 'typically short' is also another major concern if one is to consider a system that allows for products of higher learning institutions to demonstrate similar skills acquisition in the industry. There are differences among different institutions in terms of the duration of modules. Whilst semester length is generally the same for higher education institutions, the amount of time allocated for each module within that semester is different. For some institutions, there is more time awarded for each module, while for some very little time is given. ZEGU gives each module two whole weeks to allow the facilitator to introduce content, assign tasks, allow learners to engage with the content through research, etc. and then give feedback and receive the same from the educator. At the end of the two weeks, learners then go for another module or sit for their final examination. The allocated time is, however, too short because the content being covered by learners during the two weeks is similar to what they covered in the module during semesterisation which allowed them a total of over 12 weeks of learning each module.

Adding on, modularisation, as many scholars seem to agree, is associated with the notion of delivering knowledge in "bite-sized" pieces and, therefore, lends itself to time-shortened and intensive modes of delivery (Dejene, 2019). When considering the idea of bite-sized knowledge, one inevitably wonders how one can measure it. considering the differences among learners in terms of their capacities, abilities and disabilities. Zimbabwe's education policy calls for mandatory inclusive education where all learners, irrespective of abilities and disabilities, should be afforded equal opportunities. One would realise that this would be quite a challenge that would need attention so that all students across the faculty have similar content and space within which to cover that content.

The core of modular instruction, according to Botma *et al.* (2015), is to promote transfer of learning and for the educator to achieve this, consideration should be given to several factors and this is the most daunting task as many educators do not know where to start. Task preparation, for instance, is one such daunting task educators have to deal with. Coming from a system where essays for assignments and presentations would simply be drawn from existing test banks, the idea of preparing tasks would be mountainous, especially in the absence of prior training for the educator. Furthermore, due to limited time, tasks prepared by the facilitator are not necessarily tailor-made to meet each student's needs. These tasks are often prepared before the teacher meets and knows the students who, in often cases, are way too many in each class for the facilitator to even get an opportunity to know them individually to even make such a move to help. Some programmes in certain faculties attract large crowds such that preparing and supervising given tasks in the given fortnight/module is next to impossible. Assignments/tasks end up being issued in the form of group work. This strategy, widely known for its unique challenges, does not allow for individual feedback as it is hard to determine individual effort.

The use of modules, which, according to literature, is demonstrated through the use of module guides, is not unique to modularisation, as these were used before COVID-19. Modules have been in use in Zimbabwe universities during semesterisation. Universities, such as the Zimbabwe Open University (ZOU), make use of module guides, commonly referred to as modules, for each learning area and are university-published way before the module is undertaken. These modules are not necessarily textbooks, though they come in a textbook format providing learners with brief details on the content to be covered in each module, activities for students to carry out during self-study as well as sources for further reading. As a centre for open-distance learning, it seems ZOU is the only university providing this as self-study is mandatory at this institution. In all the other universities, while using "modules" as the name for the different units leading up to a degree programme, this aspect associated with module learning has not been present. However, while there may not be sources

for self-learning provided to learners in the other universities as is at ZOU, the institutions currently implementing modularisation remain making efforts towards this approach. For instance, the nature of activities that students are tasked with, such as group tasks and individual assignments which require learners to go and make research and then report back usually in the form of class presentations, are all geared towards fostering self-learning.

At ZEGU, for example, the English for Professional Purposes students were, at one point, tasked to visit the Human Resources office to find out what constitutes an interview panel, typical questions that may be asked in a job interview, the materials which should be brought to the interview and how an interviewee should dress. Following their research in which the learners had to engage with the community to gather information, they had to then report back to the class in the form of an interview simulation. This ensured that students were fully engaged in self-learning and at the same time gaining knowledge and skills that would benefit them to cope with in the real world. This module is strategically offered to Level 2:2 students who would going on industrial attachment in the following semester (Sejpal, 2013).

Adding on to the idea of self-learning, another major characteristic of modularisation is the issue of self-paced studies. Current university learning in institutions offering modularisation is not at all self-paced (Son *et al.*, 2022). The system remains institution-focused in this regard. Students still wait for four whole years before they can graduate and make use of their studies. There are no multiple entry points and the degree that one is pursuing is the only possible outcome from the studies and nothing else. The moment one enters the system during the first year of studies, the only available exit enabling one to use their study efforts is at the end of the year. One cannot consider work-related learning as exiting from the system even though it may include applying acquired theory to practice in an industrial environment.

Other universities like the UZ and CUT, use an approach whereby a whole month is dedicated to each module. A student

doing a Social Work Honours degree at ZEGU is required to demonstrate similarly competitive acquisition of knowledge and skills with a learner from UZ, when one student had two weeks of exposure to the content covered in one Social Work module. while the other had an extra one week. The UZ and CUT approach allows more time for students to self-teach or peer-teach. There is little more room for feedback from both learners and facilitator, hence modularisation is likely to produce better results compared to the ZEGU approach.

CONCLUSION AND RECOMMENDATIONS

The study sought to examine the recently adopted modularisation approach to teaching and learning in Zimbabwe universities. Even though this move was necessitated by the 2019 COVID-19 pandemic, it has also emerged as a long overdue way to reconceptualise university education as it enables theory-practice integration. Unlike the previously used methods in education which were largely theoretical, making use of such teaching methods as lecturing, modularisation is a task-based approach where learners acquire knowledge and skills through interaction with content by way of completing various given tasks. If correctly implemented, following sufficient training of educators so that they are well acquainted with the approach, modularisation can be greatly beneficial. The major challenge associated with this approach is time versus content coverage within each module. Universities applying this approach ought to carefully ensure the content to be covered within the given time would allow for effective self-learning and leave room for sufficient feedback by both the facilitator and learner.

To improve the effectiveness of modular learning at the university level, the following recommendations are made:

- Intense in-service training for educators on modularisation is key at institutional and national levels to ensure some similarity in the quality of education across faculties at different institutions. If at all, we should arrive at a level where the educator and institution do not play a role in the industry in influencing the employability of an individual at the expense of acquired knowledge or competence.
- Modularisation implications for learners should form part of the content during the orientation of first-year university

students to acclimatise them to the uniqueness of university education and its demands, while returning students should receive workshops on modularisation demands and implications.

- Quality assurance offices within universities need to ensure that the quality of learning is in line with the demands of modularisation, especially where time versus content is concerned.
- The Zimbabwe Council for Higher Education (ZIMCHE) regulates and ensures uniformity across higher education institutions in terms of time allocation for modules to ensure that all learners are afforded the opportunity to interact with content, especially for programmes, and modules provided by the MBKs.

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