Developing Curricula in a Distance Learning Environment: Attending to the Different ‘Voices’

Khetsiwe E. Mthethwa-Kunene, Patience Dlamini, Talent Rugube and Cosmas Maphosa

ABSTRACT

The offering of curricula that are relevant and responsive to the needs of society is the ultimate goal of any higher education institution. However, there is a need to engage in a curriculum development process that attends to the different ‘voices’ by addressing the needs of the different stakeholders. Stakeholders’ voices and needs can be ascertained and addressed through a curriculum development process that involves both internal and external stakeholders from the initial stages of developing curricula, throughout the various stages. Such a process may not be linear but interactive, iterative, and collaborative. This paper unpacks the curriculum development process focusing on the key stages of needs assessment, stating curriculum/programme goals, selecting curriculum content and teaching and learning activities, designing learning materials as well as evaluating. It unpacks the importance of attending to the different voices in coming up with relevant and market-driven curricula.

Keywords: Assessment, Curriculum, Development, Distance

I. INTRODUCTION

A curriculum is central to any teaching and learning enterprise as it spells out the intended outcomes of teaching and learning, teaching and learning as well as assessment issues (Al-Jubran, 2020). There are different forces that vie for control in the curriculum hence curriculum is deemed a contested field (Aliyeva, 2016). In the curriculum development exercise, there is a need to be widely consultative and involve the different stakeholders. As observed by Erjavec (2021) in the higher education system there are multiple stakeholders and the most important internal ones are the students whose ‘voice’ should be heard in the curriculum development process. Other than students in the higher education system, there are also other external stakeholders such as government, industry, the church, among others. There is a need to properly manage and include the views of the different stakeholders in higher education (Kettunen, 2015). In a distance learning environment, the views, interests, and needs of distance learners and other relevant stakeholders should be sought in an attempt to make distance education curricula responsive to the needs of internal and external stakeholders. It is, therefore, the purpose of this paper to explore the concept of curriculum development in higher education by addressing and managing the different ‘voices’.

II. DEFINING CURRICULUM

The term ‘curriculum’ is commonly used in education and yet there are differences in the interpretation and operationalization of the concept of curriculum. The main views in defining curriculum differ in conceptualisation of curriculum as a product, a process, context or praxis (Kliebard, 2000). In the view of curriculum as a product emphasis is placed on knowledge to be acquired and skills to be mastered through a learning programme. In the view of curriculum as a process, curriculum is viewed as a process of interaction between teachers, students and the content. In curriculum as context emphasis is made on viewing curriculum in the environment in which it is developed and implemented while curriculum as praxis highlights the importance of the experienced curriculum.

Grundy (1978, p.115) notes that “the curriculum is not simply a set of plans to be implemented, but rather is constituted through an active process in which planning, acting and evaluating are all reciprocally related and integrated into the process.”

Curriculum is also viewed as a process. In this view curriculum is what actually happens during the interaction of teachers, students and knowledge (Dodd, 2020). The focus of curriculum as a process is a departure of the view of curriculum as intended to curriculum as the actual or lived experiences. Curriculum as planned or intended may be
different from curriculum as implemented because there are numerous factors affecting how curriculum is implemented (Mukaro & Stears, 2017). Some of the factors affecting the implementation of a planned curriculum include teacher quality, availability of resources, learner motivation, among others. The existence of such factors often results in discrepancies between the planned and the implemented curriculum. To this end, the implementation of the same curriculum may differ from institution to institution.

Curriculum is also conceptualised as praxis. Yek and Penney (2006) aptly state that, the way curriculum is perceived influences its organisation as well the teaching and learning processes. In perceiving curriculum as praxis Grundy (1987, p.103) notes curriculum as “a process which takes the experiences of both the learner and the teacher and, through dialogue and negotiation, recognizes them both as problematic.” Underpinning the view of curriculum as praxis is the critical pedagogy which gives preeminence discourse in teaching and learning and providing students with the opportunities to critique issues, working collaboratively in solving problems in their social and cultural contexts. Similarly, Jeyaraj (2020) underscores the importance of critical pedagogy in the impacting of social change through education. Furthermore, Jeyaraj (2020) notes that through a curriculum underpinned by a critical pedagogy students learn to challenge societal vices such as exploitation, racism, classism, sexism and other forms of discrimination.

There are different types of curricula from a curriculum design perspective. The subject centred curriculum is one that is organised according to separate subjects or separate courses. This curriculum arrangement is common in higher education where curriculum is according to disciplines or specific areas of specialisation.

A. Subject Centred Curriculum

Phillips (2007) describes a subject-centred curriculum as one that is organised according to subjects, disciplines or courses in a discipline. Phillips (2007) further notes that a subject-centred curriculum manifests itself in four designs namely; the academic subjects, discipline-based, broad fields, correlation and process designs. The academic subjects design places emphasis in developing students’ knowledge, skills and values in single and isolated subjects such as History, Geography or Mathematics. The discipline-based design emphasises curriculum development and implementation through disciplines in their pure form (Ornstein & Hunkins, 2008). In the higher education system we may have social sciences as a discipline and there are sub-disciplines within the main discipline. It has to be noted that there may be no relationships drawn across disciplines. The broad fields design combines two or more related subjects into one logical subject. An example is when General Science is made up of different science subjects such as Biology, Physics and Chemistry or Agriculture being made up of Agronomy, Horticulture and Animal Husbandry. On the other hand, the correlation design while maintaining the distinct identity of disciplines or subjects, attempts to draw relationships between and among subjects and disciplines in the process design, emphasis is on teaching critical and creative thinking as well as problem solving skills applicable in all disciplines (Ornstein, & Hunkins, 2008).

B. Learner-Centred Curriculum

A learner-centred curriculum considers the needs, interests, experiences and abilities of the learners in all aspects of the curriculum development process from design to evaluation (Hoyt-Oukada, 2003). It is further noted that a curriculum that addresses the needs, interests and abilities of learners is a responsive one. The learners’ needs are multifaceted and ever changing and should be considered in any worthwhile curriculum development exercise (Gul & Khlilji, 2021). The learners’ needs can effectively be captured in the developing higher education curricula by consulting the learners about their needs. It is, therefore, important to consider the needs of the students in all important aspects of the curriculum such as content as well as the teaching approaches.

Learners in higher education have different learning needs and abilities. Some learners may be underprepared for higher education because of a weak higher education system (Human, 2017). A responsive higher education curriculum should cater for the different needs of the learners in order to accommodate even the underprepared learners. To this end, Ryan and Tilbury (2013) call for the approach of co-creation of the curriculum. In such an approach the lecturers and students should work collaboratively in the curriculum development process and in the process students are empowered.

In terms of inclusivity, a higher education curriculum should be culture sensitivity. In line with the United Nations Sustainable Development Goal 16 (SDG 16) which is titled: ‘Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels’. The cultural diversity of a society should be reflected in the curricula in such a way that no social or cultural group feels alienated.

Curriculum should also be developed in an integrated manner to show multidisciplinarity. In a real-life environment knowledge does not appear in fragmented pieces called disciplines hence the need to develop curriculum in which the learners are able to holistically solve problems by establishing connections across disciplines (Rasilla & Juárez, 2017). Hence the importance of integrating or combining disciplines in the curriculum.

III. DEFINING CURRICULUM DEVELOPMENT

Gürel and Işcan (2020, p.503) broadly defined curriculum development “as the process of designing, implementing and evaluating and revising curriculum in line with the data obtained via evaluation”. Gürel and Işcan (2020) saw assessment as the most essential and last step of curriculum creation, since program evaluation is the act of gathering data regarding the success of a curriculum, contrasting it to standards, and analyzing it.
IV. PROCESS OF CURRICULUM DEVELOPMENT

Curriculum development is a process that consists of a number of stages. This paper focuses on the following key stages of the curriculum development process: needs assessment, stating curriculum/programme goals, selecting curriculum content and teaching and learning activities, designing learning materials as well as evaluating.

Students as part of the stakeholders should also be consulted (Michigan Department of Education, 2018) argues that “Students should be members of the planning team that is putting together the education plans, programs, goals, objectives, and evaluations for their special education program; this would extend to online and blended learning environments. To be active participants in this process, students must be self-aware of both their abilities and areas in which they struggle, be able to self-advocate and state their needs to the adults responsible for creating and providing the programs and services, and be able to provide feedback throughout their education so revisions can be made to the programs and supports as necessary. Such awareness will likely be difficult for students with no prior familiarity with online learning. Consideration should be given to preparing students through information about or orientations to online learning prior to completing plans so that students can gain a more informed perspective from which to speak and make decisions”.

A. Needs Assessment – Stakeholder Consultation

Any higher education institution aims to offer curricula that are relevant and responsive to the needs of society. Needs assessment is a fundamental procedure that underpins curriculum creation. The major goal of a needs analysis is to examine how well the specified philosophy of education is being applied and how well the objectives are now being met. It involves data collection where stakeholders both internal and external are consulted. In other words, the different voices should be explored. A needs analysis should identify the learners’ qualities as well as the teacher's requirements. Learner characteristics include Demographic Profiles; Educational background; Emotional states; Learning styles; Motivation; Language proficiency; and Learner need. Teacher Needs in terms of (i) Teacher competency (ii) Developing instructional materials (iii) Motivating learners (iv) Applying selected technologies (v) Enhancing Interaction (vi) Personal fulfilment (vii) Training need. Stakeholders’ voices and needs can be ascertained and addressed through a curriculum development process that involves stakeholders from the initial stages of developing curricula, throughout the various stages. Such a process may not be linear but interactive, iterative, and collaborative.

The curriculum designed for the distance education should be learner-centered; it should create the self-learning and flexible.

B. Stating Curriculum/Programme goals

The defining of curriculum or programme goals is very important and according to Tyler (1949) aims or objectives of a course or programme are vital as the intention upon which all the other activities are built. The curriculum or course objectives are important in spelling out what the programme or course seeks to achieve. A meaningful curriculum structure, therefore, is based on well-stated goals and objectives. Curriculum content, teaching and learning approaches as well as assessment methods should all be linked to the stated curriculum goals and objectives.

C. Suggesting the Learning Experiences – Curriculum Content

Suggesting learning experiences in the curriculum design process is an important part that needs the designers to consider a number of issues. They need to take into account the knowledge, skills, values and attitudes that students need to successfully navigate the complex and ever changing contexts. The curriculum should also enable them to make positive contributions and further benefit from an inclusive and sustainable future (OECD, 2018). In essence, curriculum developers should aim at developing the whole person, one that will be able to adapt to different contexts and transfer knowledge, skills and values to solve emerging problems in any given context. Teachers should make an effort to provide demanding, engaging and differentiated instruction (Pak et al., 2020). Since the instructional goal is viewed as the basis for the whole process in curriculum development it is crucial that it is well formulated. The crafting of a well formulated curriculum goal requires curriculum planners and designers to critically consider change and recent scientific and technological innovations, economic, political, social and cultural dynamics. Altogether these form a holistic picture of what students need to learn to prepare for the future (Manurung, 2017). The Organisation for Economic Co-operation and Development (OECD) document advocates for schools to prepare students for jobs not yet created, for use of technologies not yet invented and for solving problems not yet anticipated. The same ideology goes for higher education regardless of the mode of delivery followed; conventional or open and distance, as there has to be a smooth transmission from secondary to tertiary education.

Kilic (2014) also shared the same view, they observed that the fast development that takes place in science and technology reflects upon all systems, education included and these fast changes also have an impact on distance education. The changes give rise to some new concepts and processes and curriculum planners and designers should respond to these changes to offer students an education that would prepare them for the future. Since distance education is the future of education, it is important that practitioners are flexible and responsive to innovations that take place to ensure stability of lifelong learning.

There should be a clear alignment between what is offered in the curriculum as content to be learnt and what is happening in the world otherwise the graduates will fail to navigate the world. In agreement, Kilic (2014) stated that learning itself is a social activity and it can only be more meaningful if it strongly reflects the social environment of the students. In essence, identifying content and learning experiences to engage students should be based on the issues that affect their environment; socially, politically, economically, culturally and technologically. Curriculum content therefore, should advance in accordance with the new development in all these aspects for students to remain relevant and for sustainability of lifelong learning through distance education.

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V. TEACHING AND LEARNING ACTIVITIES

Learning can be described based on the constructivist theory which suggests that students come to learn with already formulated knowledge, ideas, and understandings (Sarita, 2017). In other words, it is student-centred because it is built on the notion that students must generate meaning for themselves, learning experiences should be carefully planned to provide opportunity for students to actively interact with the subject and instruction. In this regard, Sarita (2017) points out that constructivism necessitates active engagement from students and needs teachers to employ tactics that encourage active participation from students. As a result, this learning approach is supposed to result in conversation, engagement, and information exchange with other learners.

In light of the above, Fikriyanda et al. (2018, p.49) define learning activities as “learning effort by students in physical, mental, intellectual, and emotional aspects from the hard observed activities that happened inside or outside the classroom”. The instructor’s task is to keep students engaged throughout the learning process, achieving the learning outcomes. By doing so, the effort put by learners in the learning process is likely to become more significant than instructors’ effort. Every learning activity should be useful as well as meaningful.

Furthermore, each learning activity should be aligned to the unit learning outcomes, as well as to the overall course learning outcomes. Shaltry (2020) outlines two types of alignment: internal and external. Internal alignment is described as the process of ensuring that the three elements of a course, teaching and learning activities (TLAs), assessments, and objectives, are aligned. The goal of the activity is then clear to both the instructor and students.

Activities should build on previous activities and enable students to develop their skills in innovative ways. Meaningful activities engage students in active and constructive ways. However, curriculum mapping also mentioned through past research is relatively easy to explain but difficult to implement, hence the need to automate the process. Shaltry (2020) further introduced an initiative which is the development of a new database system called e-CMS (electronic curriculum mapping system) for organizing curriculum alignment initiatives. The integration of technology in curriculum alignment enhances the way the task is handled by instructional designers hence improving efficiency and quality.

A. Learning Materials

The value of learning materials in a distance learning environment cannot be overemphasised. For any distance education programme to thrive, the design and development of high quality learning materials should be a priority (Jayaram & Dorababu, 2015). This is more so because the learning materials stand in the place of the teacher who is geographically separated from the student. Certain standards are essential for distance learning materials to be of high quality and offer optimal benefits to students. They need to be student-centred, putting the needs and interest of the varied students at the centre of the design process for optimal benefits to the users (Zabidi et al., 2017). The whole essence of learning materials for distance students is to enable them to study independently to a greater extent.

The curriculum is a framework from which learning materials are developed. The course goal stated in the curriculum is critical in directing the materials designers on the path to follow in the design and development of learning materials (Manurung, 2017). From the goal, instructional designers and subject experts are able to craft instructional objectives which are then used as the basis to select instructional materials, identify suitable instruction strategies and select appropriate media elements to integrate for effective learning and teaching (Manurung, 2017; Zabidi et al., 2017; Aydin & Aytekin, 2018).

The availability of well-designed student-centred, self-instructional learning materials that could be easily used by students without the help of the teacher is of paramount importance for distance learner (Iqbal et al., 2019; Chaudhary & Reddy, 2018; Jayaram & Dorababu, 2015). Moreover, the self-instructional learning materials should be well designed so that they motivate students to learn, be eager to search out information on their own, reflect on the content they engage with and further attend self-assessment activities integrated in the learning materials (Tahan & Sesen, 2012). In essence, the learning materials should be designed in such a way that they arouse and sustain the interest of the students. This therefore requires expertise on the part of the designing team and foundational theories of learning and communication become essential to guide the process for effective self-learning materials development. Maphosa et al. (2019) corroborate this view, they posit that self-learning materials for distance education should be written in a conventional narrative style that will close the gap between the learner and the teacher.

The learner should feel the teacher’s social presence while interacting with the material and this requires careful use of words, especially the use of pronouns; “you, I, and we” to show that they are together in the teaching and learning process. In essence, material developers need to clearly understand how students acquire knowledge, skills and competences at the same time be conversant with effective ways of communication (Khalil & Elkhideer, 2016; Chaudhary & Reddy, 2018). This is important because the learning materials are the main tools of communication between the teacher and the students as they are geographically separated from each other.

The rapid innovative changes have also impacted on the kind of learning materials that are used in higher education (Chaudhary & Reddy, 2018). One would argue that this change is actually aligned to distance education principles. Students are now able to access different kinds of learning materials online such as open educational resources. Open Educational Resources (OER) are a variety of materials used for educational purposes. They include visual resources, audio and audio-visual materials, digital books, online subjects and teacher websites (Ottenbreit-Leftwich et al., 2018). These are free for others to use and repurpose to meet their varied educational needs. People are also at liberty to retain, reuse, revise, remix and redistribute. These different activities that can be performed on OER are commonly known as the 5Rs. It is therefore essential for distance learning institutions to expose both lecturers and students to different pathways of OERs to harness their benefits.

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The rapid innovative changes have completely altered the kind of media that is used in school and higher education.

VI. ASSESSMENT

Assessment is a sub-system of the total Open Distance Learning (ODL) system. Assessment is an ongoing process of gathering evidence about students’ performance and creating an enabling feedback mechanism to improve their learning (Koneru, 2017). More importantly, assessment methods must be consistent with the objectives and teaching and learning content (Polat & Ekren, 2020). Distance learners may self-assess their learning and enhance their performance in summative assessments using the ODL system’s formative assessment (coursework) with real-time feedback (end of semester examinations). Assessment in ODL is not only meant for grading and awarding certificates to students, but assists learners for their learning improvement and for monitoring quality (Chaudhary, 2018).

Teaching and learning technologies also support assessment. The use of learning management systems (LMS) allows ODL institutions to administer diagnostic, formative, summative and competency-based assessments; grade and report learners’ performance and provide descriptive feedback (Saidi et al., 2021). Learning management systems such as Moodle supports ODL universities in efficiently and cost-effectively administering and managing online exams. Since cheating is rampant in online assessments, LMSs can be integrated with existing third-party application such as proctoring applications (Hussein et al., 2020). This can help control the problem of cheating.

VII. MONITORING AND EVALUATION OF THE CURRICULUM

Evaluation can be defined as “the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve effectiveness, and/or inform decisions about future programming” Michael Quinn Patton (1997, p.23) as cited by Lemire et al. (2020, p.49). Curriculum evaluation can be described as the appraisal of the quality and worth of a program of studies, an area of study, or a course of study. Gürel and İşcan (2020) considered assessment to be the final and most significant step of curriculum creation, because program evaluation is the process of gathering data regarding the success of a curriculum, evaluating it to criteria, and deciphering it. It might also refer to the process of evaluating the effectiveness of education.

A number of curriculum evaluation theories and models have been proposed.

VIII. IMPORTANCE OF STUDENT INVOLVEMENT IN CURRICULUM DEVELOPMENT

Scholars in curriculum development agree that if students are to play an active role in the dynamic world context and make an impact, their voices need to be heard at preliminary stages of curriculum development (Bovill et al., 2015; Deeley & Bovill, 2017; Tuhkala et al., 2021).

Educational researchers agree that there is great value in hearing diverse student voices in the design and development of the curriculum as they are its main recipient. In the context of curriculum development, students’ voice refers to giving students an opportunity to give ideas and make contributions on what learning experiences should be included and how learning itself should occur, stating how they desire to learn (Nthonthho, 2017; Bron & Veugelers, 2014). Bron and Veugelers (2014) posit that student voice is an effective way of ensuring a long-term investment in their success academically and in life in general. Their involvement in decision making pertaining what and how to learn inculcates a deep sense of ownership of the curriculum and instills critical democratic values they need to function effectively as citizens of any country.

The most important value of student voice in curriculum development is the fact that it builds their sense of academic self-efficacy which is a critical ingredient to inspire students to engage critically with more challenging academic tasks (Lac & Cummings, 2018; Bron & Veugelers, 2014). This view was also held by earlier theorists on curriculum development who wrote:

“If a school activity is perceived as interesting and or useful to his purpose, he enters into it energetically, whereas if it seems irrelevant or boring or painful, he avoids it or limits his involvement as much as he can….“ (Tyler, 1975, p. 28).

The gist of Tyler’s argument is that students’ engagement increased when their voices were heard. Later researchers’ work corroborated this view, Carini et al. (2006) for instance, observed that there was a strong correlation between student engagement and desirable learning outcomes such as critical thinking and creativity. They argued that if the goal of education is to improve the outcome of schooling, the student should take part in the development of his own curriculum. On the same vein, Dykes et al. (2013) are of the view that student voice creates a link between in school and out of school experiences, and also gives insight on the relevancy of their education to their daily lives. This further develops a critical reflective mind in the students as they engage with the curriculum that also talks to their lived experiences (Tuhkala et al., 2021). Listening to student voices, therefore, is an important aspect in improving students’ engagement with the curriculum as they will have a sense of ownership and motivation to tackle challenging tasks. The most remarkable output of all this is the holistic development of the students who will eventually be an effective problem solver in the workplace and in life generally. It has been observed that lack of students’ involvement in curriculum development can be a barrier to their own learning through disruptive behaviour because they feel disconnected to what they are learning, there is a wide gap between reality and perception (Broomen et al., 2015; Gravett et al., 2019). This therefore can affect the education system negatively as the teachers may not know the kind of challenges students have with the learning approaches used and how best to solve problems they may have. It is therefore imperative for education practitioners to incorporate student voice into contemporary approaches to teaching and learning and watch the results.
IX. CONCLUSION

Curriculum entails all the learning experiences the learner is exposed to under the auspices of an institution. Distance education learners are often exposed to ready-made curricula developed without their input. Such curricula may not address the needs, interests and abilities of the distance learner. A curriculum that considers the distance education students’ ‘voice’ is more responsive to the needs and interests of the student than one that does not.

Students are not the only important stakeholders in a distance education programmes. The important stakeholders in distance education should be identified and needs analysis as well as stakeholder consultation should be pivotal processes in curriculum development. The importance of needs analysis and stakeholder consultation is in capturing the views of important stakeholders in developing a curriculum. A curriculum should be relevant by responding to the needs and interests of the key stakeholders.

X. RECOMMENDATIONS

In the light of the foregoing discussion, the following recommendations are made:

a) Distance education curriculum should always be made relevant and responsive to the needs of the stakeholders.

b) Students are a major stakeholder in the curriculum development process and should be adequately consulted for their views to be captured in the curriculum.

c) Key external stakeholders should be identified and consulted in the development of curricula for distance education programmes.

d) The whole curriculum development process should be a multi-stakeholder collaborative exercise in which the different ‘voices’ are adequately accommodated.

“Course designers are experts in providing quality instructional experiences so that the goals and objectives of the curriculum can be mastered. These professionals are in a unique position to support the differentiated and individual educational needs of students with disabilities. Course designers can discuss the scope and sequence of the instruction, the pace with which the instruction can be delivered, and the ways that activities and expectations for performance have been designed to support the needs of students in the general education setting. This information is invaluable to a team that has been assembled to develop individualized supports for students who have disabilities. Course designers must understand how individual educational needs affect the general education expectation and progression of content, as well as potential ways that the course can accommodate individual student’s programmatic needs” (Deschaine, 2018).

CONFLICT OF INTEREST

We declare that we do not have any conflict of interest.

REFERENCES


