

Experiences and lessons learned from curriculum transformation: A case study at the University of Namibia

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Abstract: This paper presents the experiences and lessons learned from the curriculum transformation of the programmes offered in the Department of Higher Education and Lifelong Learning at the University of Namibia (UNAM). Like other universities across the globe, UNAM has been challenged by the rapid changes in the world of work and the emergency of the remote virtual mode of deliveries in teaching and learning. At the same time the curriculum was not pertinent and receptive to the requirements of the business world.

The paper used the phenomenological approach to describe, understand and interpret the meanings of curriculum transformation process. The researchers collected data by recording their lived experiences during the university curriculum transformation process. The data was analysed thematically. The findings alluded to the fact that the curriculum would fit the intra and inter disciplines to ensure multiple career pathways, as well as progression and articulation between disciplines. The relevance and responsiveness is anchored on the innovative teaching and learning methods and the diversified assessment strategies. The consultations contributed to the relevance of knowledge, skills, values and attitudes, and interpersonal skills required by the real world.

Keywords: Curriculum, transformation, higher education, assessment, instructional approaches.

INTRODUCTION

Curriculum transformation is an issue that has been under discussion for many years. This has been brought fore by the increasing number of graduates' unemployment due to mismatch of programmes offered by institutions of higher education and the employment careers available in the world of work. In the era of advancement in the world of work, perhaps the question to ask is whether the curriculum being offered at the institutions of Higher Education (HE) today is relevant and responding to emerging revolution in the industry. These transformations are influenced by advancement in technology, the presence of 4th Industrial Revolution and the new normal caused by the outbreak of COVID-19. A call was made by the Association of African Universities (AAU) for universities in Africa to change "urgently" to device other methods of conducting teaching and learning using technology as an alternative approach and different distance learning techniques in the emerging of the closures of Higher Education Institution (HEIs) to contain the spread of COVID-19 "Sharon Dell and Wagdy Sawahel (20 MARCH, 2020).

The study focused on experiences and lessons learnt from the curriculum transformation of the programmes offered in the Department of Higher Education and Lifelong Learning at the University of Namibia (UNAM). Like other universities across the globe, UNAM has been challenged by the rapid changes of the world of work and the emergency of the remote virtual mode of delivery in teaching and learning due to COVID-19 pandemic. At the same time the curriculum was not pertinent and receptive to the requirements of the business world. In order for the Department of

Higher Education and Lifelong Learning to remain relevant and unlimited in the world of work, a bachelor programme named the Bachelor of Education in Organizational Learning and Development (Level 7) was initiated. The bachelor programme would be offered through Face-to-face, Blended learning and Distance mode of learning. The main aim of the bachelor programme is to provide well qualified and capable personnel to engage in the organisational learning and development of adult clientele in the private and public sectors globally. Additionally, the bachelor programme would ensure graduates' are equipped with knowledge, skills and values to competently facilitate and manage learning and development programmes aimed to drive societal transformation. The bachelor programme would be delivered through social entrepreneurial and self- directed learning approaches (University of Namibia, April 2020).

In response to the instructions from the university management, educators needed to switch gears and work together locally. This also include secure necessary infrastructure, experience and expertise to make the emerging curricula a success. It was also discovered that educators worked together closely more than ever before to ensure that the process of curriculum transformation was successfully completed. Furthermore, educators experience challenges of practical aspects of time conflicts, anxieties of how to handle multiple ideas from academics. The initiated bachelor programme was expected to meet the following changes as proposed by the university management in the Curriculum Transformation Framework (University of Namibia, April 2020):

- Changes in semesterising the academic year: Semester 0, Semester 1 and 2
- Challenges in ensuring the quality of the new proposed modules
- Consultation of public, parastatal and private sectors
- Authentication and validation
- Industry relevance and fit for purpose
- Avoid mismatch
- Collaboration and cooperation
- Resource mobilization
- Offshoots from modules: Short courses
- Registration on the National Qualifications Framework of the Namibia Qualifications Authority
- Accreditation with the National Council of Higher Education

The above list calls for application and implementation of constructive alignment. Constructive alignment is a key element in curriculum transformation. The principle of constructive alignment for formulating teaching, learning activities and assessment tasks is the core concept in curriculum design and development to attain envisioned learning outcomes in higher education to produce engaged learning (Liaqat, 2018). This statement is further support by Loughlin, et.al (2020) by stating that constructive alignment is anchored in the practice of learning and learning and offered an opportunity for theory to underpin practice for academics to rethink how they conduct their teaching.

Problem statement

HE systems can benefit from the practical experiences of curriculum transformation process to improve practice. The sharing of experiences and lessons learned is critical as there are few experiences and lessons learned to assist HE landscape in Namibia to understand curriculum transformation from a pragmatic point of view. Most of the studies done in Namibia concentrated in the following: educational transformation (Kandumbu, 2005), and curriculum transformation in Namibia (Aloovi, 2016), and

Conceptual framework

The conceptual framework for this study is graphically presented below:

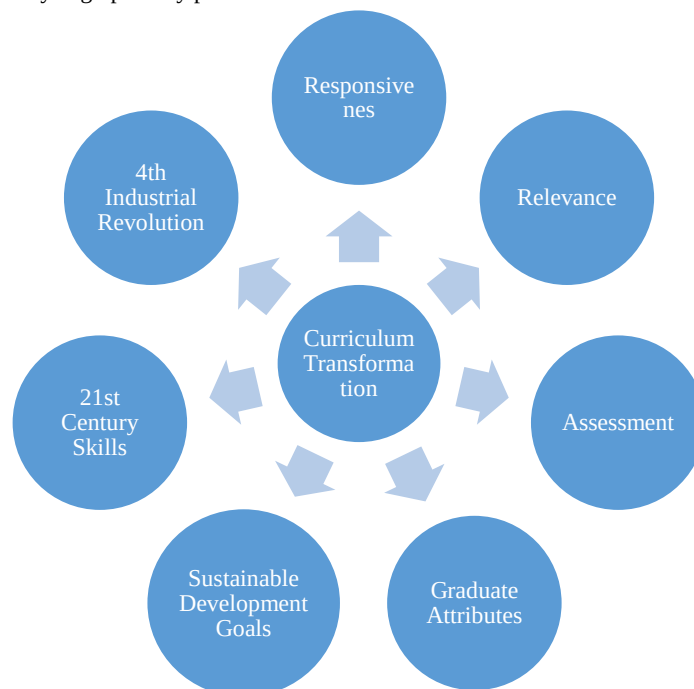


Figure 1: Conceptual Framework

curriculum construction (Bhola, 1999). The focus and discussions of these studies were in the formal education system of primary and secondary schools as well as adult education system. Therefore, this study focus was on institution of higher learning. The experiences and lessons learned will be drawn from staff members in the Department of Higher Education and Lifelong Learning at the University of Namibia.

The study would provide hands-on and real life experiences on how curriculum transformation should be carried out to ensure completeness, addressing of mismatching and ensure constructive alignment to the requirements of the industries and world of business.

Literature review

We draw from a historical and growing literature to narrate the experiences and lessons learned from transforming the curriculum in the Department of Higher Education and Lifelong Learning at the University of Namibia.

Curriculum transformation is a key issue in higher education discourses to ensure curriculum responsiveness and relevance in order to achieve various developmental goals, agenda and strategies such as Sustainable Development Goals (SDGs), Fourth Industrial Revolution (4IR), Agenda 2063: The Africa We Want and Continental education strategy for Africa CESA 2016-2025.

Drivers of curriculum transformation

The drivers of curriculum transformation in the global Higher Education discourses characterized by Receptiveness to social context fostering Epistemological diversity to ensure renewal of pedagogy and classroom practices. This will ensure an institutional ethos of candidness and critical reflection for gender equity; diversity and inclusion (University of Pretoria; University of Namibia, April 2020).

Africa's Development Path

The African continent as a whole, holds a marginal economic position in the global context. The rate of reduction in poverty achieved so far is not 'in pace' with the minimum standards set by the Sustainable Development Goals (SDGs). In 2003, The New Partnership for Africa's Development (NEPAD) point out that an interdisciplinary response is needed to deal with developmental issues in Africa, which would seem to denote that all lecturers in Higher Education Institutions (HEIs) should embrace and actively be engaged in curriculum transformation processes (Lotz-Sisitka and Lupele, 2005 in Holmberg and Samuelsson, 2006)). This issue seems to have not been addressed adequately until today as there are pockets of curriculum being not relevant and receptive to the requirements of the industry and world of business.

Challenges for African Higher Education Institutions

The emergency of globalization coupled with immense changes in the world of work, HEIs are required to transform their curricula and their research priorities to fit in the changing landscape. However, the complex landscape of environmental and sustainability issues yields a additional multifaceted epistemological challenge. According to Lotz-Sisitka and Lupele (2005) in Holmberg and Samuelsson (2006), epistemological challenges result as the consequences of risks can only be incompletely known and many 'solutions' continue to be open ended, and imperfect, as scientific certainty remains indefinable. An added complexity in an African context is the relatively poorly documented nature of African epistemology. The contemporary globalising discourse of 'internationally acceptable standards' is, in numerous conducts, delaying chances for reflecting African epistemologies as most HEIs effort to strive according to these 'international standards'.

Curriculum Relevance

The global trend is the increasing involvement of government in inducing higher education out of its ivory tower to be relevant and unlimited to address global challenges. According to the 1997 White Paper on Higher Education (DoE, 1997), higher education is expected to surge its receptiveness to societal interests and requirements. To this end, the restructuring should meet the requirements of an increasingly technologically oriented economy, and its institutions must produce vital research, world class trained personnel and knowledge to prepare a developing society to address national desires and participate in a rapidly transforming and modest global context. The essential for globally equivalent skills raises the debate about curriculum significance and responsiveness.

Throughput and keenness depend on the capacity to yield exceedingly skilled and adaptive knowledge personnel who can manage and deploy knowledge and information and adjust to volatile, uncertain complex and ambiguous (VUCA) global markets. Such knowledge personnel should have well-developed problem-solving skills, system thinking and be able to frequently fine-tune their range of knowledge and skills to converting situations. In such a context, it is regularly contended that the role of higher education changes from an initiation into the specialised knowledge of exact specialisation to the development of comprehensive, general, transdisciplinary, multidisciplinary, cross disciplinary and transferable skills. In essence, higher education institutions worldwide are being urged to become extra receptive to

the requests of the knowledge- based economy and digitized world (Ogude, n.d).

Conceptualising Curriculum Responsiveness

Receptiveness is behavioural change when driven by inducement to respond. It is a representative of biological organisms. Adaptation to transformation in environmental conditions ('learning') is an ecological prerequisite of survival. The drive to survive in today's world is receptiveness. As practical to universities, responsiveness entails the ability to satisfy society's wide-ranging prospects that higher education will acclimatize to transformation and add value to national imperatives. 'Institutional responsiveness' is linked to the context, purpose and time of the reply. Timing has been classified as problematic to the process of curriculum receptiveness. An example of 'immediate responsiveness' would be challenging to win a contract to deliver tailor-made facilities.

Based on the above example, a university, like a consultancy firm, has to quickly and conveniently yield the best proposal to satisfy the client's requirements. Furthermore, 'substantive receptiveness' would be describing graduate attributes, implanting them into the institution's curriculum and teaching and assessment practices and indoctrinating them into its culture and practice – this may take some years. People from different background can view an institution's performance at varying points in time form different sentiments about its receptiveness to desired needs. There is an element of 'continuous improvement' contained in the concept of responsiveness (Gallagher, 2001). The review of international trends and the national policy have increasingly emphasised the responsiveness of higher education to the goals of economic and social development, including regional and international developmental agendas.

Requirement of Education to Achieve Sustainable Development Goals (SDGs)

The world is working towards achieving the 17 goals of sustainable development which set by General Assembly of United Nations. The assembly selected the 2030 Agenda for Sustainable Development. The 17 goals commenced in January 2016 and are expected to be in existence for 15 years to drive international development work. In terms of education, quality education is inscribed in goal 4 of the agenda. Goal 4 emphasizes the need for quality education to ensure equitable and inclusive education and promoting life time learning opportunities. This agenda focuses on the shifting of fundamental thoughts and recognizing the dynamic interlinkage between three aspects i.e., economic, social and environmental, driving integrated and universal development in all the nations of the world. Through education, many other Sustainable Development Goals (SDGs) can be achieved. The people can break the vicious cycle of poverty when they are able to obtain working knowledge, skills and competencies through quality education. Education is the journey through which inequalities can be condensed and it also authorizes the people to live more sustainable, dignified, meaningful and healthy life. Education can also foster tolerance in people and make the society additional nonviolent and inclusive (Adegbesan et al, 2010). "Education must, contribute to a new vision of sustainable global development" (UNESCO, 2015). Setting out on the way of manageable advancement will need a momentous transformation of how people reason, work and perform. To make a more

maintainable world and to draw in with supportability linked problems as depicted in the SDGs, people must advance toward becoming maintainability change-creators from the initial stage.

The Fourth Industrial Revolution (4IR): Renewed Human Resource

The power of 4IR is to drive inclusive benefits for all in addition to the ability to challenge our society and hinder (social/socio-economics) development by replacing human capital with machines. Therefore, the workforce, needs to have greater access to relevant higher education and education of quality learning to function in the 4IR revolution. Low-skilled work will become rarer in the future as foreseeable responsibilities are substituted by machines.

The reskilling and upskilling of both high-skilled and low-skilled workers should be done to remain relevant, responsive and unlimited. In the 4IR, a cultural change is requisite to encourage progressive learning and engaged learning. In other words, the assembly of institutions must be prepared in a way that branches the development and intersectionality, interdisciplinary, multidisciplinary and cross disciplinary of new concepts, disseminate successful cases inside or outside of the university enclosure, and rewards student-focused teaching innovation (Gleason, 2018).

Industry 5.0 also called society 5.0 complements Fourth IR. The emphasis is explicitly placed on research and innovation at the service of the transition to a sustainable, human-centric and resilient industry. This new paradigm shift transpires at the edge of traditional disciplines. The influences between different disciplines are becoming the core of the new technologies, in a not multi-, not inter-, but in a trans-disciplinary, seamless style. At the same time, the restrictions between different disciplines (and many other things) are corroding.

21st-Century Learning Skills

In the 21st century, people need to have high level thinking skills called 21 century learning skills in order to solve new problems of the new world. People should know how to use their knowledge and skills in real life context. The learning skills are summarized under the three main subtitles; information and communication skills, thinking and problem-solving skills, interpersonal and self-directional skills. When educational problems are changing, at the same time solution proposals to these problems are also changing. Therefore, to achieve the goals for 21st Century Learning Skills require the new approaches and new methods to teaching and learning to be meaningful (Sahin, 2009). The Partnership for 21st Century Skills, proposed the following six elements to be followed in order to realise the 21st century learning skills (Partnership for 21st Century Skills 2008);

1. Emphasis should be on core subjects.
2. Emphasis should be on learning practical skills.
3. The use of 21st century tools to develop learning skills.
4. Teaching and learning should be based on 21st century context.
5. 21st century contents should be taught and learned.
6. The use of 21st century assessments that measure 21st century skills.

Assessment

Assessment in HE is critical to ensure authentication of knowledge and skills learned. Through the curriculum transformation, graduates would be expected to learn and be assessed on humanistic principles where desired competence outcomes based on praxis will be accentuated than general mastery of theory (University of Namibia, April 2020). This approach could be viewed as assessment propelled by theoretical foundations of social constructivism and could be equated to transformational learning. "Transformational learning means profound, structural change in basic premises of thought, feelings, and actions" (Transformative Learning Centre 2016, para 2), drawing on the work of Habermas (1984) and Freire (1970, 1973).

'It is the kind of learning that results in a fundamental change in our worldview as a consequence of shifting from mindless or unquestioning acceptance of available information to reflective and conscious learning experiences that bring about true emancipation' (Simsek, 2012:201).

Methodology

This study employed the phenomenological approach which is a research design from the paradigm of qualitative inquiry. It is a research method where the research participants are required to narrate their experiences, what they think and believe about a phenomenon. In this study the phenomenon is curriculum transformation. The phenomenological approach was used to describe, understand and interpret the meanings of curriculum transformation process. The researchers collected data by recording their lived experiences during the university curriculum transformation process. The data was analysed thematically.

Findings

In the modern age, there is no nation that can independently maintain a civilised way of living unless universities are at the forefront. Universities operating in the 21st century need goodwill and support of industry stakeholders to dual aim of higher education and the quest of maximum knowledge. Curriculum transformation presents opportunity for the involvement of various stakeholders in the process to ensure validity and quality. This resulted from the Department of Higher Education and Lifelong Learning embarking on a stakeholders' consultation to validate the transformed curriculum and ascertain quality and appropriateness. Stakeholder Engagement (SE) influences on the department reputation, both nationally and internationally. The stakeholders consulted can be found in figure 2 below.

Public	Parastatal	Private
Office of the Prime Minister	Namibia Training Authority	Bank of Namibia
Parliament of the Republic of Namibia (National Assembly and National Council)	Namibian Ports Authority	CNNC Rössing Uranium
		Old Mutual

Figure 2: Names of stakeholders consulted

The following were the themes selected from the stakeholders' consultation discussions:

1. Alignment to the Sustainable Development Goals (SDGs)
2. Alignment to the 4th and 5th Industrial Revolution

3. Incorporation of the 21st century skills

Alignment to the SDGs

The year 2015 and 2016 have seen remarkable changes in the use and application of knowledge and skills gained, with the emergence of the Sustainable Development Goals (SDGs). The extensive, change and inclusive SDGs portray actual trials for humankind. The importance of the 17 SDGs is to create a practicable, inaudible, affluent and fair life on the earth for everybody now and later on. The objectives cover worldwide complications that are critical for the survival of humankind. Quality education is engraved in SDG-4 putting emphasis on education to play an important role in the upliftment of human living (Nazar et al., 2018).

Alignment to the 4th and 5th Industrial Revolution (IR)

The above IRs calls for the Curriculum to be accessible. This means, in the era of 4IR and 5IR, lifelong learning is a necessity for humans to compete with machines. Therefore, students (or more precisely people) should be capable of learning and working in everyplace, with uninterrupted access to study materials, and keeping their peers within reach. Higher education institutions thus need to make a great leap in creating more accessible learning platforms for students and faculties to be collaborative and productive.

Incorporation of the 21st century skills

The knowledge and skills gained by people from core subjects should enable them to know more to cope with the demands of the 21st century and beyond. People should know how to use their knowledge and skills in a practical manner— by thinking critically, applying knowledge to new situations, analyzing information, comprehending new ideas, communicating, collaborating, solving problems, making decisions. Currently, students have changed radically to embrace 21st century. Today's students are not compatible with the educational system that is currently designed to teach them the issues and engagement of the current world (Sahin, 2009).

The stakeholders consulted cemented the emerging issues by indicating the need for a graduate who could act, think and collaborate with others. This is because in the world of work, team work is key for understanding organizational culture.

Principles followed to get work done in a very limited time:

1. Contacts – maintain the contacts with your colleagues.
Participation – maintain participation in all proposed developments.
2. Planning – making plans and organize time to consult others for each change to be made.
3. Communication – detailed instructions on communication
Flexibility - to compensate for the unexpected requirements.
4. Transparency – to clarify expectations
5. Collaboration – To create a community of practice of experts in subject matters and to make connections to enhance collaboration.
6. Re-imagine:
 - A culture that promotes a Learning Community of Practice in every discipline/field.
 - Effective, collaborative learning and teaching resulting in success rather than burnout, competition, and continuous stress.
 - Expansion of epistemological access and success.
7. Rethinking

- Teaching and Learning Delivery Modes.
 - Assessment Strategies - different forms of assessments.
 - Curriculum would fit the intra and inter disciplines to ensure multiple career pathways, as well as progression and articulation between disciplines.
8. Relevance and responsiveness is anchored on the innovative teaching and learning methods and the diversified assessment strategies.
 9. Consultations contributed to the relevance of knowledge, skills, values and attitudes, and interpersonal skills required by the real world.

Diversification of Assessment

Another interesting finding was on the need to diversify assessment tools and strategies to ensure inclusivity. Through the process of curriculum transformation, the university policy on assessment provided wide range of various assessment types to enable students with any weaknesses in one type of assessment to take advantage of the variety presented. The university emphasized that assessment would be premised more on criterion referenced approaches to tap more on competency domains. This would also effect and entrench competency based learning, in response to the Industrial Revolution Curriculum 4.0/5.0 (University of Namibia, April 2020). The usage of criterion referenced approaches would serve as a tool to augment the development of desired skills in the university graduates.

Moreover, on the learning and teaching, the study availed an opportunity for educators to re-imagine, rethink and revise the exit learning outcomes of the programmes/qualifications that they were offering, the learning and teaching strategies and methods, e-learning and how they want to go about it and making conscious decisions about assessment strategies. In the process, transforming the curriculum became a way of knowing about how to change, be relevant and responsive. The study is ongoing and at the end, it will be a collection of views and perceptions of curriculum change process at the University of Namibia.

Conclusion

This paper provided deeper understandings into the necessary process of curriculum transformation to create and promote beneficial industry relevant academic programmes. Furthermore, the paper pointed out that accelerating curriculum transformation is imperative in the ever changing world to remain relevant and unlimited.

It is also important to state that African Intellectual should be consolidated to ensure decolonization of higher education discourses. Moreover, higher education landscape demand for constant and continuous curriculum transformation to ensure responsiveness to industry and societal needs. Cooperative work integrated learning should be incorporated in the curriculum to avoid widening the gap between theory and practice. Finally, the paper shed more light on fulfilling 'Accelerating Transformation to Consolidate the African Intellectual Programme'.

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