

Leadership in Open and Distance Learning at the Namibia University of Science and Technology to Ensure Competitive Advantage and Optimum Benefits

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Abstract

Even before independence in 1990, it was recognised that Open and Distance Learning has the potential to address Namibia's educational and training needs in a cost-effective manner. Today Open, Distance and eLearning (ODEL) has the flexibility to accommodate varying levels of enrolment and the capacity to reach out to all corners of the country. It has come to be accepted as a well-recognised mode of education and training relevant to, and necessary for, meeting the emerging demands of the Namibian economy and society. For Namibia, a small country in terms of population, and with limited resources, the Namibia University of Science and Technology (NUST) opted to strengthen its ODeL activities. As a result, areas until now unreached by the conventional education system are being taken care of by the NUST ODeL system.

This paper reports on the changed nature of the role of universities in the 21st century. Specifically, the author argues that NUST, while remaining a university of academic excellence and creative thought, was prepared to transform its conventional role of creating and transferring knowledge. NUST, as a very young university, through its Centre for Open and Lifelong Learning (COLL), has become within a short period an institution that seeks to provide knowledge and academic expertise to a much wider community than could be reached through on-campus teaching. NUST can now, through distance learning techniques and open learning philosophies, reach out to the entire community in which it serves, through its footprint across all corners of the country. This required not only new initiatives and approaches to teaching and delivering methods, but also an acceptance that the most sophisticated concepts can be taught in formats that off-campus students can understand. NUST transformed into a truly dual-mode university, recognising the equal importance of ODeL programmes to the more conventional programmes of full-time on-campus studies and research.

Through COLL, NUST indicates that ODeL has the ability to provide a collaborative learning environment in a flexible and interactive manner, provided careful design and implementation approaches are adopted to create an enabling environment for effective and efficient performance of staff and students. This paper specifically examines management through a transformational leadership lens to facilitate sound initiatives, designs and implementation strategies at COLL to ensure needed competitiveness and optimum benefits for a 21st century university. The author concludes that COLL's initiatives have clearly proven that there is little doubt that a transformational leadership style, efficient management and administration, instructional design and the provision of sound tutor and learner support can effectively meet the training needs of off-campus students and is at the centre of sustainable development and quality distance education within today's higher education landscape.

1. INTRODUCTION

Pursuing higher education through open distance and eLearning (ODEL) offers a great deal of promise in Namibia, a country of vast geography, and a widely distributed population. The opportunity to learn away from a physical university campus, either at home or in a local community or regional setting, can provide the flexibility required by adults who wish or need to continue their education, but have multiple roles and responsibilities that do not allow full-time study or on-campus attendance (Möwes, 2005). With emerging arguments like these that ODeL is increasingly being regarded as a viable policy option for developing countries with limited educational resources for buildings, books and teachers, seeking to increase accessibility for large numbers of students in education and training opportunities, the Namibia University of Science and

Technology (NUST) has been challenged to transform its policies and procedures to accommodate the ever-growing number of students.

2. BACKGROUND AND HISTORIC OVERVIEW

The former Polytechnic of Namibia (PoN), renamed NUST on 16th November 2015, started operating as an independent and autonomous institution on 1 January 1996. Two years later, a separate Centre for Open and Lifelong Learning (COLL) was set up within NUST to accommodate students who were unable to attend full- or part-time classes at the NUST campus in Windhoek. Based on its growth the Presidential Commission on Education, Culture and Training (1999) recommended the transformation and renaming of the institution as Namibia University of Science and Technology. The consultancy carried out by the National Council for Higher Education (NCHE) has recommended the transformation and renaming of the Polytechnic as *Namibia University of Science and Technology (NUST)*.

COLL has grown from an Administrative Centre in 2002, mainly responsible for processing of assignments, following the single writer approach to develop instructional material and providing minimal student support with a staff complement of four staff members, to a Professional ODeL Centre of 48 full-time staff members. The main task of COLL is to design and offer a distance educational experience that encourages meaningful learning. As such, COLL moves swiftly, purposefully and productively to embrace the notion of equality of opportunity through its implementation of a holistic approach, attending to four inter-related sub-systems, i.e. a courseware development sub-system; an academic student support sub-system; an administrative sub-system; and research, monitoring and evaluation sub-system, whereby all four sub-systems function as an integrated whole (Erdos, 1975). As such, this approach emphasises the systemic management model of COLL, complemented with a transformational leadership style to meet the needs of its students.

COLL has experienced a substantial increase in enrolments over recent years and now accommodates more students at tertiary level than any of the other publicly-funded ODeL tertiary institutions. This expansion may be ascribed to enhanced internal procedures to improve the design and delivery of ODeL programmes. Student enrolment for the distance education mode of delivery has increased with more than 200% since 2002, now standing at 2 971 students, while the course enrolment of 33 752 increased with more than 150% and reflects service delivery and course offerings to 8 438 students of the 13 531 students registered at NUST. The course enrolment statistic indicates that 62% of the 13 531 students registered at NUST, studies through COLL, which is a clear indication of COLL's delivery of flexible learning to many residential students who also register for some of their courses on the distance education mode of study. This profile classifies NUST as a truly dual-mode public tertiary institution that offers flexibility and blended learning, which is in line with trends at universities worldwide.

3. INSTITUTIONAL TRANSFORMATION AT NUST TO MEET DEMANDS FOR HIGHER EDUCATION

COLL's vision to become "internationally recognised and distinguished for the design and delivery of supported open distance and eLearning" by building on its strengths, which include a team of motivated and well-trained staff, high-quality instructional materials and a network of regional centres to provide adequate, efficient and decentralised student support services, enjoys a high degree of support from the NUST Top Management, Council and Faculties. As a result, the institutional culture is being re-oriented towards ODeL, in conjunction with the development of eLearning and blended learning approaches for conventional students.

In addition, NUST revised internal rules and procedures that place unnecessary restrictions on those who wish to study through the ODeL mode. A practical example of this is the change-over to a new system of recording a student's mode of study. Previously, students registered for either full- or part-time studies on campus could not take any of their courses through the distance education mode. However, since 2003 any student can choose their preferred mode of study on a course-by-course basis.

The NUST integrated education system allows students to choose freely whether they wish to study through ODeL or conventional methods on the basis of personal preference or individual convenience. As a truly dual-mode institution, those students registered for face-to-face study programmes are able to take any of their prescribed courses through ODeL if they wish to do so, provided that the course is offered through COLL.

There are no differences in the curriculum, syllabus, assessment methods and performance standards prescribed for a particular course.

No distinction is drawn that tends to disadvantage either form of delivery and no distinctions are drawn that make it difficult for students to benefit from concurrent participation in either mode.

NUST has been generating extraordinary interest amongst prospective students. In this context, Prof. Tjama Tjivikua, in his Vice Chancellor's Address at the official announcement of the renaming to NUST and as part of the NUST Transformation Agenda stated:

The steady transformation from a diploma-granting technikon into a degree-awarding university of science and technology has been driven by a new thinking, a realisation of the necessity to create opportunities and find solutions for society through human capacity development
(NUST, 2015).

Fundamental to this steady transformation, in an attempt to drive Namibia to become a knowledge economy as defined in the country's Vision 2030, and in justification of its position as Namibia's leading tertiary institution of science and technology, NUST capitalised on both old and new approaches to teaching to put in place an effective nationwide delivery structure that ensures much wider access to higher education than has been achieved previously.

Spurred by continuing growth in the demand for higher education, especially among adults, NUST adopted methods of ODeL to transfer knowledge to a much wider community than could be reached through on-campus teaching only. However, initially and for some time, the emphasis on distance education at NUST has been on preparing courses and then on finding and implementing means of making them available off-campus. In recent years, though, there has been evidence of increasing critical reflection on an approach that may have given access prominence over success, quality and the needs of students. Today, COLL is demonstrating greater concern with human questions relating for example, to access and participation going hand in hand with students' needs, persistence and factors that contribute to success and satisfaction for distance education students. As a result, the NUST 3rd and current 4th five-year strategic plans provided evidence and clearly articulate strategic goals geared to steer COLL to be a very significant partner in the provision of quality higher education. Fundamental to these strategic goals is the objective to not only produce highly acclaimed instructional materials, but to complement it through the provision of sound administrative and academic support services to ensure students' success.

4. REFORMS AND QUALITY ASSURANCE PRACTICES

To fulfil the aims and objectives of COLL's transformational leadership and systemic management model, several reforms and quality assurance practices have been put in place since 2003.

4.1 Outreach and Effective Use of Appropriate Technology

COLL's infrastructure has grown with the establishment of ten Regional Centres across the country where ODeL students have access to a full range of administrative and academic support services. The Regional Centres are equipped with state-of-the-art ICTs, including wireless internet connectivity, an increased number of computers and library books, online library issue facilities, direct access to online journals, conducive study facilities and examination halls, while the centres were renovated, furnished and equipped with resources which are far superior in size, comfort and convenience than the previous facilities. This establishment of COLL's own network of Regional Centres provides the ideal infrastructure for more responsive services and improved access to ICTs for those living outside of the capital.

Having overcome a daunting challenge to establish its network of regional centres, and currently a fully-fledge satellite campus as part of the NUST Regional Expansion Strategy, COLL is in a position to roll out what is believed to be the latest in ODeL delivery. The installation of a reliable and stabilised state of the art IT-infrastructure for the past eight years at the Regional Centres makes it possible for tutor-markers to use MOODLE as its eLearning Management System (LMS) - which allows instantaneous electronic exchange between students and faculty, and offers the delivery of advanced eLearning courses. Whereas it is true that

students who do not yet have access to their own digital communication devices still have to come to the Regional Centres, academic student support has reached an unprecedented potential for quality. COLL's commitment to infuse the teaching-learning process with appropriate ICTs as an alternate way to deliver teaching and to provide an optimum virtual and blended learning environment to support students' learning in an active, collaborative, participatory and contextual manner, resulted in the launch of its first fully-fledged eLearning courses in July 2010, while the continuous professional development online two-month short course that COLL offers to faculty to capacitate them as qualified eTutors and eContent Developers, has resulted in the World Summit Award (WSA) nomination for best eContent in Namibia, followed by the Commonwealth of Learning (COL) Award in 2010 for Institutional Excellence in Distance Education.

To this end, COLL also produced its first Augmented Reality (AR) Campaign in 2014 to integrate technology in teaching and learning as part of its print-based instructional material to allow instructional material to not only be presented as text to the distance learner, but to also support their various learning styles. The AR initiative was another first for ODL in Namibia and produced as part of the strategic initiatives as set out in the previous (3rd) Strategic Plan for COLL to further enhance the academic support provided for students and to keep abreast with pedagogic innovation, using the latest technology in education. As a member of the Namibian Open Learning Network Trust (NOLNet), COLL produces radio tutorials, broadcast through the National Broadcasting Corporation (NBC), which in turn, are also made available online through the web-based NUST Campus Radio to supplement print-based instructional material and to capitalise on this media that is available to the majority of Namibians.

4.2 Cost-Efficiency and Cost-Effectiveness

It costs only N\$18 600 (or about USD 1306) for every full-time equivalent (FTE) Student Year of inputs through the distance education mode, even when a reasonable proportion of overheads has been added to the direct expenditure shown in the accounts for COLL. This figure is roughly half the average cost of providing conventional instruction for students on campus. The unit cost per FTE Student Year Completed for those registered for distance education studies is only 56.2% of the equivalent figure for conventional students. Namibia's Education and Training Sector Improvement Plan (ETSIP) targets for cost recovery at tertiary level are 30% for the period 2008-2010, rising to 35% by 2019 (Ministry of Education, 2005: §E.5.1.a, page 72).

COLL has already exceeded the ETSIP target, which highlights both the cost-efficiency and cost-effectiveness of ODL in NUST as a dual-mode university and strengthen the case for further expansion of COLL's activities.

4.3 Good Quality Instructional Material

COLL participated in the institutional audit by the Higher Education Quality Committee (HEQC) of the Council on Higher Education (South Africa), mandated to assure quality in tertiary institutions through programme accreditation and institutional audits. As part of the outcome of the institutional audit, the HEQC commended COLL for its good quality instructional material that are based on the South African Institute for Distance Education (SAIDE) quality criteria and guidelines which are internationally benchmarked. Particular reference was made to the instructional material being interactive and allowing students the opportunity to direct their own learning while engaging with the content.

COLL is the first ODL institution in Namibia that adopted the Commonwealth of Learning (COL) electronic template launched in 2006 at PCF4 in Jamaica. The COL electronic template was contextualised to suit the COLL House Style Manual and helped writers, who are often novices with the use of computers and writing of distance education instructional material, cope with the two tasks, and in the process develop professionally. This electronic template designed for the development of self-instructional material has helped improve the quality of instructional material and resulted in huge cost savings and a quicker development process, yet still applying the team approach involving different role players which include writers, content editors, instructional designers, language editors, media specialists and a quality controller.

4.4 Adequate and Efficient Student Support Services

The geographical realities of Namibia, with a relatively small population distributed over a large national territory, have often been cited as critical factors in shaping the provision of education in the country. While ODeL holds out the promise of reaching students around the country, there are many practical difficulties in

ensuring that the necessary support services and facilities are accessible to them and delivered adequately and efficiently. Regardless of which media and technologies are used to deliver course content, those studying at a distance still need to be in direct contact with staff from institutions from time to time.

Realising the vital importance of adequate, decentralised and efficient student support services to ensure access to education is coupled with success, the NUST Regional Centres are equipped with the highest level of resources and the most up-to-date facilities in the country. Students visit the Regional Centres and the main campus to have access to the following student support services:

- obtaining information/publicity materials;
- availing of academic advice/counselling for course/programme selection;
- online application;
- online registration;
- registering for a free email account;
- paying tuition fees/other charges;
- receiving study materials;
- attending orientation sessions;
- attending face-to-face tutorials;
- attending business simulation sessions;
- practicing computer literacy skills;
- registering to be part of a study group;
- making use of a quiet, well-lit study space;
- reading/ borrowing library books;
- reading online journals;
- making photocopies;
- using computers/printers;
- accessing MOODLE as the LMS for eLearning courses;
- accessing video-conference tutorials through WebEx;
- contacting tutors and support staff via email;
- receiving online feedback on returned tutor-marked assignments
- accessing online administrative services, i.e. financial statements, update of biographical data, examination timetables, vacation school timetables, assignment results, examination results;
- responding to sms reminders and notices received through mobile phones;
- accessing the COLL Facebook Page for administrative and academic support;
- listening to radio tutorials on the NUST Radio Station;
- submitting (online) assignments; and
- sitting for examinations/other forms of assessment.

4.5 Response to National and International Imperatives

Namibians need access to learning in ways that are less dependent on considerations of time, place and structures, while allowing freedom to learn in ways that are more consistent with personal needs and learning styles. Given its profile, reputation for quality and focus, COLL complemented this contribution of making tertiary education more accessible by responding to the National Development Plans, Vision2030, the then Millennium development goals (MDGs) and the current Sustainable Development Goals (SDGs) as follows:

- i) The demand for access to NUST underscores the prevailing demand for the local availability of the NUST study programmes which are career-focussed and technology-driven. NUST therefore expanded access to the Regions to address this demand in the rural areas and least developed areas to further transfer and decentralise the NUST products and services to the Regions;
- ii) 64.5% of the distance education enrolment are females. Similarly, more than half of the NUST students are women, while specific student recruitment is targeted at girls to enrol for engineering and applied science programmes;

iii) NUST has an institutional HIV and AIDS Policy and students and staff take part in the National HIV Testing Day, which aims to give students the opportunity to learn their HIV status; serves as a gateway to access HIV care and treatment; and contribute to the reduction of HIV-related stigma and discrimination. The National HIV Testing Day is facilitated at both the main campus and the COLL Regional Centres, while the Office of the Dean of Students has a dedicated department responsible for the HIV and AIDS Awareness Campaign and HIV and AIDS Peer Counselling;

iv) COLL offers a specialised Certificate in Environmental Education (EE) to adults who wish to know more about applying EE in their community or work. It is an introductory EE *professional development* certificate. The Certificate follows current trends in adult education and is therefore learner-centered and participatory; and

v) NUST continuously pursues internationalisation as a strategy to reduce the gap between local skills, competencies and expertise deficits and the cutting edge of international knowledge. In this regard, COLL has offered its two month online course for eTutors and eContent Developers to ODeL Practitioners within SADC to capacitate faculty with the development and delivery of eLearning courses. Similarly, COLL has developed an online Work Readiness Module to prepare students for the world of work as part of their Work Integrated Learning Course, which is a requirement for graduation at NUST. As such, youth and graduate unemployment is addressed and 21st century graduate skills are facilitated and developed through ODeL design and delivery.

5. CONCLUSION

The foregoing is a success story of an initially purely Administrative Centre that has transformed its leadership and management model to operate as a Professional ODeL Centre in a dual-mode set-up, enjoying strong support from Top Management to embrace the principles and methodologies of ODeL and to ensure parity of standards to deliver quality tertiary education. COLL nurtures lifelong learning and is an integral part of the human resource development strategy in the country. Vision 2030 puts significant emphasis on science and technology and articulates specific growth rates and requirements for professionals in the critical growth areas such as the financial sector, natural sciences, engineering and agriculture, as well as on technicians and technically skilled workers.

The knowledge economy, as projected through Vision 2030 and the NUST strategic objectives, is requiring new skills of graduates and is changing the types of knowledge that are required in the work place and other spheres of life. The increased importance of knowledge, knowledge creation and value-added economic activity means that an increasing proportion of the population and a more diverse student body will need to access higher education during their lifetime. Realising that a modern university must provide a flexible learning system and recognising that many students are now combining study with work, the NUST study programmes offered through COLL are designed in such a way to meet the needs of these students through flexible approaches to teaching. ICTs provides an additional avenue of very dynamic opportunities in which COLL can structure, teach and deliver its academic programmes. With a network of ten regional centres across the country, equipped with state-of-the-art ICTs and facilities to provide students with a full range of administrative and academic support services, COLL compares among the best tertiary ODeL providers in the SADC region.

The changing profiles and demographics of students and workers, resulting in new demands, require a responsive university. Consistent with the NUST vision to educate leaders for the new economy and its mission to promote national competitiveness by providing multiple opportunities for excellent education, applied research, innovation and service, it is COLL's strategic objective to provide the most conducive learning environment and facilities to students (Möwes, 2014).

Though many challenges were faced and some still need to be addressed, the above account of growth, development and effectiveness in ODeL have resulted in a move towards student-centred learning, promoting the intellectual development of the distance education student through continuous interaction and students' active participation in the learning process. The transformational leadership model and quality assurance practices were successfully implemented, because of the NUST-COLL responsiveness to its students' needs and expectations and top management's recognition of the equal importance of ODeL programmes. This responsiveness, however, calls for the current integrated and holistic leadership model to be continuously

modified and refined as institutional and government policies and procedures change and new student needs and expectations emerge.

6. REFERENCES

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