

**FROM PASSIVE TO ACTIVE ACADEMIC LIBRARIAN:
MY TRANSFORMATION IN LEARNING AND TEACHING DIGITAL
INFORMATION LITERACY SKILLS IN HIGHER EDUCATION**



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BY

MARTIN VELISHAVO SHILUNGA HIPANGWA

(201504257)

SUPERVISOR

LUKAS MATATI JOSHUA

30 OCTOBER 2021

DECLARATION

I, Martin V.S. Hipangwa, hereby declare that this portfolio is my own work and a true reflection of my study, and that this work, or any part thereof, has not been submitted for a degree at any other institution.

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Name of student: Martin V.S. Hipangwa **Signature:**  **Date:** 30 October 2021

DEDICATIONS

To 'Tate' @98

You remain thankful and inspirational. Thank you for living to witness all these achievements!

Grace upon Grace.

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ACRONYMS

ACRL- Association of College and Research Libraries

ALA- American Library Association

GSN- Geological Survey Namibia

HEI- High Education Institution

LIS-Library Information Science

MLIS-Masters in Library and Information Science

NESEIC- National Earth Science and Energy Information

UNAM- University of Namibia

WHTC- Welwitchia Health Training Center

DIL- Digital Information Library

HE- High Education

ICT- Information Communication Technology

NUST- Namibia University of Science and Technology

PDHE- Postgraduate Diploma in Higher Education

IL- Information Literacy

UNESCO- United Nation Educational and Scientific and Cultural Organisation

TPACK- Technological Pedagogical Content Knowledge

1. WHO AM I- AN INTRODUCTION

I grew up in a rural area on the outskirts of Helao Nafidi Town Council. I grew up as an avid reader. After school, when we have to tend cattle and goats, I used to sneak to a small library in the neighborhood, just to read a book, while looking through a window to see if the livestock are still there. I have never traveled to visit family members or go out for holidays for the rest of my school years from grade 1 till grade 12, but through the library, I traveled to most of the world's places through reading. I always wanted to be in the library and dreamed of working in a library one day like the librarian who used to work there.

My motivation for wanting to work there was always to read all books in the library and assist my peers with their literacy education. For me, the librarian's kind gesture and excellent customer service were the real deal, and I've always wanted to learn how to become one when I grew up. I came across the book "Careers in Namibia (2005/2006)" in 2008 when I was in Grade 6. On page 560, I discovered my lifelong passion, "Librarianship." I still read it now and then to remind myself that I have come a long way and indeed I still have a long way to travel.

This was the journey I have travelled until I attained my BA Honours in Library and Information Science (LIS) with a double major in Geography and Environmental Studies. I did not end there because the librarianship passion was burning in me, I then pursued a Masters in Library and Information Studies (MLIS) with specialisation in Leadership and Management in LIS and Digital Curations with the University of Cape Town.

1.1 Many hats I have worn during my time Welwitchia Health Training Center

During my professional career as an academic librarian, I have worn many hats and worked for different academic and research institutions. Previously, I have worked at Welwitchia Health Training Center (WHTC), I established the Department of Library and Information Services with libraries at their 4 campuses. I was working at WHTC when I came to PDHE course. When I entered the academic grounds, I was expected to represent the library and information services department in the institutions various bodies and committees such as the Institution management Committee, Accreditation Committee, Quality Assurance committee, Curriculum review committee and Remote Emergency Teaching and Learning Committee, Examination Committee just to mention a few of them. I found myself in all these committees by virtue of being the only

institution librarian. All these duties and responsibilities require me not only to have knowledge in my discipline of library and information sciences but also to have knowledge on teaching and learning to effectively contribute to the mission, vision and objectives of the Institution. It was unfortunate that I did not have a background knowledge in the field of teaching and learning and I was expected to deliver information literacy skills training to students.

Initially when I joined the academic journey with Welwitchia Health Training Center, the perception of what a library has to contribute to the academic endeavors of the students, not only that but how can a librarian contribute to curriculum planning, learning and teaching, quality assurance, technology integration in higher education etc. was still an area to explore in the institutional landscape. The library serves a central role of a support system for knowledge creation and knowledge management, providing access to relevant, appropriate and timely information in support of the mandate of the Institution.

How can the library do this effectively in the era of 4th Industrial era? I realised that my role was changing from being a passive librarian to being an instructional librarians who is responsible to instruct digital information literacy skills. This resulted in me instructing and giving digital information literacy training to students and staff members. This became more vital during the emergency remote teaching and learning due to COVID-19 pandemic, people shifted from traditional way of teaching to online teaching which requires both lectures and students to acquire digital information literacy skills.

Despite giving out training and facilitating instruction classes, I realised I was still lagging behind in terms of relevant learning and teaching skills to instruct digital literacy skills sessions. Through this portfolio, I will reflect on how I went through a morphogenesis process throughout the Postgraduate Diploma in Higher Education (PDHE) course. Throughout this course I realised that it was only through reflective practice that I will change my practice in terms of learning and teaching in Higher Education (HE).

1.2 My tenure as the National Earth Science and Energy Information Center

After my journey with Welwitchia Health Training Center (WHTC), I went to join a vibrant team of researchers at the National Earth Science and Energy Information Center (NESEIC). NESEIC is a Ministerial reference Information Centre within the Ministry of Mines and Energy. It operates

under the Department of Geological Survey of Namibia (GSN). It has a long mission to collect, provide and promote adequate use of comprehensive, accurate and timely scientific, mining and energy information to its diverse clientele, and has a vision is to connect users to quality information and services by delivering resources on earth sciences and energy for the advancement of Namibian society. The center serves the Ministry of Mines and Energy Staff members of which mostly of them are researchers within the earth sciences, mining, and petroleum and energy sectors. As research libraries redefine their services, much of the work that the librarian do is to facilitate sessions for digital information literacy skills. Innovative technologies have changed the way we deliver services, and the way we interact with our diverse users. As librarian responsible with all the dealings library, one of my obligation is to instruct digital information literacy skills for the upskilling and reskilling of the workforce working as researcher within the Ministry.

1.3 Golden Thread

Library instruction teaching, just like all other courses in an institution require relevant skills and expertise, so that one can effectively deliver it to the intended audience. Currently there is a gap on how digital information literacy skills training is offered in academic/ research libraries, due to lack of pedagogical knowledge from academic librarians. In the 4th Industrial Revolution, the library takes a center stage at the heart of institution to enhance that, this skills are passed to the users/ students. Through the PDHE course, I went through a transformation process and I will use my agency to change from a passive academic librarian to an active game changer in digital information literacy education in my professional role as a librarian. Therefore, this is the golden thread of this portfolio, which readership shall be seeing throughout this portfolio. The portfolio chapters reflect my morphogenesis process thought the PDHE. This is my story!

The next chapter introduced different contextual realities that are facing Higher Education globally, internationally, nationally, locally and institutionally.

2. CONTEXTUAL REALITIES OF IN HIGH EDUCATION: TRANSFORMATIONAL TURN IN DIGITAL INFORMATION LITERACY EPOCH

2.1. Introduction

This paper focuses on the contextual realities in Higher Education and brings forth the criticality into one's own digital information literacy skills' scholarship of learning and teaching using Margreth Archer Theory of Critical Realism domain of structure, culture, and agency. This critical reflexivity is a result of one's practice as a young novice academic librarian who instructs digital information literacy skills and trying to swim in the pool of academia. In the epoch of the 4th and 5th Industrial eras, academics are expected to deliver quality digital information literacy skills to students and staff members. Library instruction teaching, just like all other courses in an institution require relevant skills and expertise so that one can effectively deliver it to the intended audience. The contextual changes that happened at the global, international, national, and institutional levels, which shaped the scholarship of learning digital information literacy skills, academic libraries, and Higher Education Institutions (HIEs) in general are discussed. Through reflectivity of one's own experiences, help with creating a more dynamic, empowered, liberatory educational experience of teaching digital information literacy skills as an academic librarian. Recognition of lifelong learning skills especially digital information literacy skills is equally important and should be included in the curriculum as a core course rather than a one-shot program to enhance the exit outcome skills of graduates. Finally, equipping academic librarians responsible for digital information literacy should be considered as a priority area due to the rapid change in the information landscape.

Library instruction teaching, just like all other courses in an institution require relevant skills and expertise, so that one can effectively deliver it to the intended audience. The constant change in pedagogy necessitate attitudinal changes on the part of educators (Raju & Raju 2015). Currently there is a gap on how digital information literacy skills training is offered in academic/ research libraries, due to lack of pedagogical knowledge from academic librarians. In the 4th Industrial Revolution, the library takes a center stage at the heart of institution to enhance that, this skills are passed to the users/ students. Through the PDHE course, I went through a transformation process

and I used my agency to change from a passive academic librarian to an active game changer in digital information literacy education. The portfolio chapters reflect my morphogenesis process through the PDHE rigorous process. The portfolio is a reflection of my morphogenesis process through the diploma course.

This chapter explores the contexts of Higher Education that serves an enablement or constraints to quality teaching and learning. Higher Education landscape have changed dramatically over the past years, and it have evolved into different shapes (Barnet, 2004, p. 63). As a starting point, the first part of this chapter focuses on the enablement of teaching and student learning in Higher Education. In the same accord, this chapter will also highlight and expand more on the constraining factors that are making the Higher Education Institutions to rethink and reinvent their roles (Shalyefu, 2017, p.75). Since context differ from institution to institution, this chapter will look into the context of higher education in general with regards to academic library contexts through the Namibia research and academic library lenses, inspired by my practice in these spaces.

2.2. Contextual factors informing DIL in Academic/Research Libraries in HE

Higher education has changed dramatically over the world. Some of these shifts and disruptions place institutions of higher education in difficult relationships with the participants in their broader environment, including the host state, students as consumers, the world of employment, and, yes, rival institutions of higher education in an era of competition and marketisation (Barnet, 2004).

In light of the above, Digital Information Literacy (DIL) is a concept without geographic boundaries in librarianship. Across the world, academic librarians work toward developing students' abilities to effectively find, evaluate, use, and create information (ACRL, 2017). This section reflects and discusses how contextual factors in Higher Education (HE) informs my agency in learning and teaching of digital information literacy skills. The shift in how academic libraries operates as well as digital information literacy teaching and learning, happened dramatically.

Against this backdrop, Bewick and Corral (2019) noted with great concern that the teaching role of academic librarians has expanded and diversified over the past two decades in tandem with socio-demographic, technological, economic and political developments that have transformed HE globally. These changes have significantly informed the practices of academic libraries to change from knowledge keepers to learning institutes at the heart of universities or research institutes.

Through the global, international, national and institutional level, there have been much changes that informed learning and teaching of digital information literacy skills in HE institutions, as discussed below.

2.2.1. Global and international level

Generally, globalisation is the free and unrestricted movement of people, resources, and services around the world in such a way that it seamlessly merges and blends cultures, and opens up trade and interaction between states and economies (Otoló, 2020). Previously, higher education institutions were seen and referred to as knowledge creators and keepers. We are currently witnessing the democratisation of knowledge and access. This is owing to the great expansion in the availability of knowledge online and the vast extension of access to university education in both developed and developing countries, which has resulted in a fundamental shift in universities' roles as knowledge creators and keepers. This not only pose a challenge on lectures but on library instructors in developing countries such as Namibia to up their game on how best they can offer digital information skills training to both the lectures and students.

2.2.1.1. Disruptive technologies

Firstly, one of the change the world have experienced lately, is the advancement in technology. The advancement in technology happened and continues to evolve rapidly, as a result, this disrupts the status quo of how learning and teaching of digital information skills is being done in HE. Just as the globalisation hits the High education fraternity, information hubs for researchers and academia have also been greatly hit by the force of technology and globalisation. On a positive note, Otoló (2020) noted that, people all around the world can now use digital libraries to access books and other information resources for any educational course of their choice, all made possible by the ever-growing evolutionary tendencies with technology (advancements) in a digital world (globalisation era). This made learning and teaching at all level possible because one can access libraries in United States of America through libraries in Namibia, or access information from different part of the world. Although there is a difference between development in the global north and global south, technology advancement made communications and HE business possible for everyone in the continent.

The curriculum I went through at the undergraduate level was theoretical, therefore it did not prepare me to be a pro-active librarian but a passive one. It did not also cover the issue of teaching

and learning, thus constraining most librarians in academic practice to suffer when it comes to teaching. The curriculum I went through only prepared me to function in a traditional manner of running a library but not to look beyond this such as collaboration with the global community on issues related to librarianship. This impacted my practice first when I took up academic librarianship position because my job was only to do library administrative work and give a surface training on information literacy. But things have changed rapidly, and I came at the time of 4th and 5th Industrial Revolutions that requires a proactive educator who can effectively teach digital information literacy skills to the academic community. Bignoli and Stara /Harnegie (2021) argued that, as educators in the academic library sphere, given the core tenets of librarianship being “grounded in user experience principles, attitudes, and practices,” the authors posit that, while change can be disruptive and unsettling within the scope of library work, developing and maintaining a strategy to manage these inevitable shifts is not only possible but also necessary.

Learning in the digital age is distinguished by the use of rapidly evolving technology, a deluge of knowledge, and a highly networked global community, in contrast to earlier generations (Green, 2018). The change brought by technology in the globalised world is digital technologies. This requires digital skills for one to be able to participate in digital technology world. The question remains, where will the students and academics learn these skills? Who will teach them these skills for them to be able to participate in the globalised world? There have been blame shifting of who to do what and when in terms of capacitating the university population on digital information literacy skills. As a response to these changes and answering these questions as an academic librarian, I started searching for opportunities so I advance my career. Through participating in strategic workshops and quality assurance trainings, I gained experience but still lacked teaching pedagogies to advance my learning and teaching experience in digital environment. Thus, when I was afforded the opportunity to study toward the Diploma in Teaching and Learning, I grabbed the opportunity with both hands. As a point of departure, academic libraries have their role to play in the capacitation of students and staff members on digital information literacy skills, this idea is expanded more in the next chapters of this portfolio, Technologies in Higher Education.

Across the globe, specific technology powered innovations have been recorded in different libraries. These innovations have improved and enriched learning through ease of information utilisation (Otolu, 2020, Li, Chen & Wang, 2021). Issues of lack of technical know-how, frequent

break down of technical infrastructure, cost of maintenance, digital divide in developing countries, cybercrime (e.g. computer systems hacking), digital rights management among others serves as the challenges facing the academic libraries to function in global spaces. In the case of institution A where I worked first as an academic librarian when I enrolled for the PDHE, it was quite a fairly new institution and most of the above mentioned challenges were evident. I would want to teach information literacy but there were only two computers in the library, making it impossible to achieve the digital literate student I have envisioned for.

2.2.1.2. Democratisation of knowledge and free access to information

In addition, the evolution of Information Communication Technology (ICT) and the internet in particular has vastly increased the distance and speed at which information can travel (Inefuku, 2017). The question was always, why I should go to the library when I have the democracy to search for my assignment information on Google or Wikipedia. Since everyone had access to information, does not necessarily mean they have access to the correct information, hence the need for academic librarians to unpack the know how's of how to access the content online. Due to the information overload, many researchers and students struggle to dive through the silos of information on the internet, and is hard to come out with relevant results, raising a call for digital information literacy skills instructions as a matter of urgency in the Namibian institutions of Higher Education.

Not only that, but the low funding to libraries widens the gap of access to information. Low spending on higher education compromises quality of education, lifelong learning opportunities, and other reforms that promote access to and availability of higher education for those who want to participate in it (Pajayon-Berse, 2019). Democratisation of higher education must confront questions on accessibility, availability, affordability, participation, and quality. Especially in middle income country like Namibia, to have access to information in high peer reviewed journals, you have to buy that information if your library did not subscribe to that content, of which most of the academic library such as Welwitchia Health Training Center (WHTC) library did not subscribe to many e resources apart from Research 4 Life Database. Through my practice as a librarian, I have realised that, most researchers that researched in many areas affecting our society have published in 'high impact journals' but do the people that need to use that information have access to that information? Now what is the purpose of publishing in high impact journal, therefore there

is a need to transform this epistemic imperialism that dominated the South and East. The south and East in this case, is not geographical, but refers to those in the periphery and not at the centre of the knowledge creation the (North and West). This is Eurocentric way of thinking that west should be the scale to measure others' ways cognition. To what extend that our researchers are participating in the open access and scholarly communication? Do this findings reach the intended audience so that they can inform policy information? All these areas remain un-researched or under-researched in Namibia. What is available to most students and researchers is surface information that they can find on Google, and most lack skills to dig deep to find information which is a constraint. To dive deep, they need capacitation in digital information literacy skills, and this has to be done by me as an academic librarian, to strengthen the process of research and lifelong learning skills.

2.2.1.3. Internationalisation and Massification of students in Higher Education

Institutions of higher learning are not operating in a vacuum and they are not only locally but operating within the global fraternity, thus global mobility plays a major role in the context of Higher Education. Global mobility will grow for students, academics, and university brands. This will not only intensify competition, but also create opportunities for much deeper global partnerships and broader access to student and academic talent. Historically, while Africa was realigning its' HE system to meet the challenges of the new millennium, international students mobility around the world increased markedly (Kishun, 2011, p.143). The number of student increase calls for the change in service delivery in HE. In 2020 alone, Namibia University of Science and Technology (NUST) registered 700 international students, UNAM registered 689 international students, while Welwitchia Health Training Centre registered 50 international students. This symbolises how the local institutions are attracting international students to their programmes. The diversity of student challenges the way I present my training lessons to align my teaching to a wider range of possibilities and library instruction was not an exception to this.

As noted by Pajayon-Berse (2019), pushing for a more responsible internationalisation entails providing equal opportunities and horizontal reciprocity among partner HEIs as well as broadening internationalisation beyond the numbers provided by outbound and inbound mobility of students. Inclusion may involve integrating international components in the overall planning of activities within the HEI campuses to provide that internationalisation opportunity even to those whose

access to mobility is limited. Responsible internationalisation must aim to mitigate the elitism inherent to internationalisation itself. For internationalisation to embody inclusivity, various economic and socio-political contexts across the globe must be confronted, particularly issues borne out of policies that leave out a great majority of student population worldwide behind (de Wit & Jones, 2018). Aligning library instruction to international bodies' frameworks such as American College and Research Libraries (ACRL) and American Libraries Association (ALA) etc.

High education institutions are operating in a globalised world, where the 4th and 5th industrial era is taking a centre stage, as a result, it is not spared from the constraints and the enablement of technology advancements, student mobility, knowledge marketisation and internationalisation. Knowing and realising that I too, I was and still operating in a global world enabled me to change my practice to suit the current trends in digital information literacy as being practiced by other academic facilitators in other parts of the world, in doing so I also recognised that, it is not a straight road but a rocky one that is characterised by digital divide, lack of digital skills, data privacy, high cost of technology and cost of maintenance among others.

2.2.2. National level

The historical trends of High Education Institutions (HEIs) in Namibia as discussed by Amukugo (1993), Boughey (2011), Matengu, Likando and Kamungu (2014), Shalyefu (2017), reflects on the fragmentation of HEIs system, which is viewed in the line of vast disparities in the allocation of resources and quality of education as well as ethical and ethnic lines. Although no study was found that focused more specifically to academic libraries in HEIs during the compilation of this reflective portfolio, most challenges presented in literature reflects the challenges faced in academic library, but still there is a huge gap that is not filled, of which I intent to fill after the compilation of this portfolio.

The combination of changing social, financial, educational and technical contexts encouraged me as a multifaceted practitioner to question every aspect of how HEIs librarians in Namibia are driving the conversations and carry out their business of encouraging learning and teaching of digital information literacy skills. This section explores how the policies guiding and governing academic libraries hinders or enable the learning and teaching of digital information literacy skills

in the academic plethora. The hardest pill to swallow is the one presented by Arreman, Erixon and Rehn (2016), that Namibia is a rich country with poor people, it continues to be a country with huge income inequality, and the black majority remains excluded from education, labour, resources and capital due to institutionalised inequalities.

2.2.2.1. Digital divide

Nationally, Namibia is strike by the digital divide, internet access and lack of digital literacy skills (Shihomeka, 2019), this impacted the level of digital literacy skills of students at the HEIs impacting the graduate attribute skills in the area of digital literacy skills in many workplaces. Hence the lagging behind of many research libraries in moving from print to e resources provision in many ministries. As a research librarian working in a government research library, I am challenged to make sure that, colleagues within the research institute are upskilled and reskilled when it comes to digital information literacy for their continued educational growth as member of society and researcher.

2.2.2.2. National policies and guidelines

At the periphery of national level lies, policies, guidelines, institutions and governing bodies that guide and regulate the dealings of Higher Education Institutions in Namibia. Specifically, libraries of all types are governed by the Policy Framework for Libraries and Allied Information Agencies for Namibia, September 1997. In addition, the Namibia Library and Information Service Act 4 of 2000, serve as guidelines for library practices in Namibia. There policies guiding the library sectors are old and do not reflect the current trends such as open access, digital information literacy etc., as a result impacting the delivery of the capacitation of users in such areas.

2.2.2.3. Curriculum development

Institution of Higher Learning History shows that the intentions and ambitions of many curriculum innovations failed because the complexity of the design and implementation processes was often overlooked. Lack of teacher involvement in curriculum design processes is seen as an important cause for these disappointing outcomes (Pieters, Voogt & Roblin, 2019:1). Teacher are the key implementers of a curriculum but it emerges that they are left out of the design of a curriculum that they have to implement on a daily basis. This is absurd observation in the current epoch. In July 2021, President Hage Geigob formed an eight-member task committee to assist the administration in seizing chances in the 4th IR. Vice chancellors and other professors from higher

education institutions are among the members of this panel (Petersen, 2021). This task force was required to conduct a country assessment to determine the readiness of Namibia for 4IR, and make recommendations towards a coordinated and coherent policy and legislative framework. This are some of the strategies put in place in Namibia to harness the opportunities that lies ahead us in the 4th IR. Will this have an impact on digital information literacy curriculum, this remain an unexplored area and I will expand more in the Curriculum development Chapter 5 within this portfolio.

2.2.2.4.Lack of funding

Lack of funding is affecting learning and teaching as fees of HE institutions are ever increasing and some students cannot pay for themselves. This can already shows that, if one cannot fun their studies, generally they cannot afford educational materials such as books, laptops and internet. Currently there is a global crisis due to COVID-19, with education facing economic austerity measures. In countries such as South Africa, the education system still faces systemic challenges largely attributed to the legacy of the apartheid system even twenty years on (Ng'ambi & Bozalek, 2016), and this is no different to Namibia, as Salyefu (2017) puts it that Namibia's education system was fragmented along racial and ethnic lines, with vast disparities in both the allocation of resources and the quality of the education all attributed to the apartheid system. The independence of Namibia and many African countries brought hope that higher education could provide a key to economic development and better standards of living. It seems we are yet to witness this. Colonialism as project seems to have ceased but imperial subjugation in episteme and commerce we remain consumers on what the imperial capitalist has to produce for us.

2.2.3. Institutional level

Generally, three factors in particular have hindered the capacity of the Namibian libraries to sustain high quality services, budget cuts (more than 75% in 2017) and staffing challenges. Through my practices as an instruction librarian, I have realised that, Institution of HE are becoming more industry oriented. Institutions are building deeper relationships. Integration with industry, in the coming decade, universities will need to develop significantly stronger relationships with industry in order to differentiate learning and teaching programs, support research funding and application, and reinforce universities' role as catalysts for innovation and growth.

Welwitchia Health Training Centre is relatively a small private institution compared to other institutions such as UNAM, NUST and IUM. Welwitchia Health Training Centre is a registered private higher education institution in Namibia with a special focus on Health, Social and Management Sciences. The organisational structure is not that big, but it has a great impact on how learning and teaching is conducted in the institution. Due to the students and satellite campuses increase, the management could not contain such numbers and as a result, poor leadership skills and burnout which leads to lower performance by the staff members. According to McCaffery (2010), the unprecedented change confronting universities today are exposing the flaws in this traditional approach to university governance. To govern an institution requires new skills especially in times of COVID-19, because there is a need to change policies and transform the curriculum which requires new perspective while putting in to consideration the aim, vision and mission of the institution.

Even though the institution is small, it is growing rapidly with three more other campuses outside Windhoek. This put a strain on harnessing the institution's library resources and digital information literacy trainings because there were not enough computers for students as well as the poor network connections that disadvantage students to use e-resources. This constraints learning and teaching especially in case of digital information literacy skills because as a librarian, I have to wait for the computer lab to be free so that I can embark on my trainings, which sometimes not convenient.

2.2.3.1. Lack of pedagogical guidelines

Although there is an increasing support and use of technologies to promote learning, the lack of pedagogical guidelines have tended to lead to most educators integrating technologies in their teaching without an explicit pedagogical rationale. As mentioned earlier that, the curriculum did not prepare many if not all librarians to be teachers, teaching digital information literacy remains a challenge to many. This is not different to the introduction of digital information literacy integration in Higher Education in the Institutions. Students and lectures at the university level are required to conduct independent research in a variety of fields and themes, and thus, regardless of their areas of study, they must use information properly. They should not only be able to find material in print or electronic media, but they should also be able to analyse and apply it professionally in their academic activities as well as in their later life.

2.2.3.2. Budgetary constraints in libraries

The development of a thorough sustainability plan is very important, both to fully weather the current budgetary situation and to identify priority areas for investment to help keep the libraries meeting essential services. Although libraries are at the centre of the institution, I somehow disagree, in practical terms the library is not always at the centre unless it is doing what it supposed to do. If the library was at the heart of the institution, then its budget cut will not be the first to be cut because is very vital to the workforce as well as the students. I have realise that, it depend to the management of the library and what impact are they bringing to the institution that enables them to receive funding or have the funding cut. Budget cut hinders the work of the librarians in providing lifeline skills to the students.

2.3. Conclusion

Understanding these bewildering changes in higher education, can help those involved in academics and university administrations to be able to align their practices appropriately. Decolonisation represents a further dismantling of western cantered institutions, systems, symbolism, and standards within the higher education system and other systems. Institutions must therefore ensure flexibility, that is, while still maintaining loyalty to traditional values (culture). Institutional management (structure) have a shared responsibility to ensure that the institutions take the former path. It is therefore equally important to understand the structure and culture of the institution in order to be the agent of change.

As a change driver (agent) in the institution and a pioneer for change in the information literacy skills, I am confident that, I will influence change of the status quo in learning and teaching in our institutions where I find myself. This I will do it by setting up the modus operandi of influencing the curriculum development and propose an ideal learning and teaching strategy. Breaking barriers in the areas of library and information services such as the notion of saying “Librarians work is just to give out books and sit in the library waiting for those that will come to borrow books” which is not the case here. Librarians are gate keepers of information and they equally influence the learning and teaching of students and academic staff members or researchers. Without librarians, no one to enforce the notion of information literacy skills and lifelong learning as well as instilling that into users hearts.

As part of a commitment to assurance of learning, institutions of higher education should invest in a thorough examination of the information and technology literacy skills, needs, and perceptions of students both coming into the institution as well as following course completion. These types of activities are a necessary for continuous improvement. The expansion of education technology and increasing reliance of universities on it to reinforce their legitimacy, relevance and efficiency has already given rise to much criticism, therefore facilitating and at the same time hindering the provision of Higher education in Namibia (Mellul, n.d.). Due to the technological advancement in high education, it is now a must for higher education institution to embrace this fact, and now, during difficult times such as COVID 19 pandemic, this advancement made it possible for education to continue at High Institutions in Namibia. Thanks to the technological advancements, that high institutions did not halt their academic years but they progressively continue touching lives. Given the contextual realities in Higher Education, the next chapter I discussed my morphogenesis process of learning and teaching as well as rethinking my practices into instructing digital information literacy skills.

3. RETHINKING DIGITAL INFORMATION LITERACY LEARNING AND TEACHING

3.1. Introduction

In this chapter, I focused on learning and teaching of digital information literacy skills in terms of academic libraries context. In the area of student learning, academic libraries are in the middle of a paradigm shift. In the past, academic libraries functioned primarily as information repositories, now they are becoming learning enterprises (Bannett, 2009). This shift requires academic librarians to embed library services and resources in the learning and teaching activities of their institution. In the new paradigm, librarians focus on information skills, not information access, they think like educators, not as services providers. Having spent my respective career in an academic library which is a one man library, I am reflecting on my teaching role as a librarian, the struggles and how I managed to occupy the learning and teaching spaces within the institution. Within this reflection I will also include my involvement in teaching digital information literacy skills to adult learners in an inclusive environment. While the role of librarians in offering support to learning has always been accepted, the role of librarians as teachers continues to be contested, questioned and resisted (American Library Association, 2010; Ching & New, 2021).

3.2. My role as an academic librarian at the crossroad of teaching and learning

As an academic librarian, I do perform many different tasks, emanating from the key responsibility areas of information literacy instruction, research support, faculty liaison, collection development and marketing (Chanetsa & Ngulube 2014). While some in Higher Education (HE) may argue that librarians are not teachers, other would counter that, librarians have always been educators because the most enduring and flexible agency for learning is the library. Just as libraries/information centers have been places where people read, consult, and do research.

During most of my orientation programs, since they're always last in the orientation programs, I was faced with students showing lack of attention in the midst of the training, some will be on their phones, some will express that they do not come to the library so what is the use to come to be in the library training. And many questions that show no interest in library dealing. One interesting comment that I got from a student was "*Sir, will this contribute to our continuous assessment marks?*" I answered in disbelief, "*O, yes for sure, you will write a test that will*

contribute to your CA marks!” I know this was not an honest answer but, I answer in such a way that I win the attention of most students. The whole experience kept me thinking the way I am teaching and my pedagogical knowledge. What theory should I use to underpin my teaching and how should I do it? All these questions were at the back of my mind when I was presenting these sessions to students.

As Hughes and Quinn (2013) posited that, the above examples and the issues associated with them are often regarded as reality shocks and critical incident. The experiences can be meaningful because they are completely new and they can be both challenging and thought provoking, to some extent, they bring home the reality of teaching adults.

My role as an academic librarian have been influenced by many contexts as discussed in chapter one of this portfolio, from global, international, national and local factors. Given many changes that have happened throughout my PDHE journey, my roles as an academic/ research librarian have been the same throughout with some minor changes. Many of my roles have been identified by Benjes-Small and Miller (2017) as follows. Authors identify eight different roles that instruction librarians often play in their work: colleague, instructional designer, teacher, teaching partner, advocate, project manager, coordinator and learner. They argue that these sometimes overlap, but that they all stem from a deep and profound concern for student learning and the belief that information literacy is a critical component in an individual’s professional and personal growth. In addition, as represented by Figure 2.1, those are my roles and that’s were my role of teaching digital information literacy skills falls.



Figure 2.1. Roles for teaching librarian with their interconnectedness (ALA, 2017).

3.3 Learning and Teaching Theories

Upon entering academic ground, to me, learning and teaching was all about a lecture standing in front of students or presenting a lesson over zoom or google meet and other platforms, now I realised that it is more than that. When I went through the PDHE programme, I realised that the one shot digital information literacy programs that I give to students during orientation was not enough and in itself is not teaching. Just like Quinn (2018), I have learned that, learning and teaching is a scholarly activity that goes beyond the classroom or a lecture presentation. The thinking of learning and teaching as an activity that is bounded to lecture room, need to be recontextualised to our current times.

From my enrollment in the PDHE course, I have spent my respective career developing a conceptual understanding of the pedagogical principles underpinning professional library service delivery to inform leadership in the transformation of services and engagement with a wide range of institutional and national learning and teaching agendas (Corrall & Jolly, 2020). As my focus and passion in digital information literacy skills increases, my actions and teaching are now guided

by the American Library Association which has defined information Literacy (IL) as “the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning.” (p3). This definition is also adopted by the ACRL Framework for Information Literacy for Higher Education which will be referred to in this chapter. Employing this definition to my learning and teaching expanded my scope of practice in teaching the subject matter, which was uncoupled with the Catalyst for Learning conceptual framework.

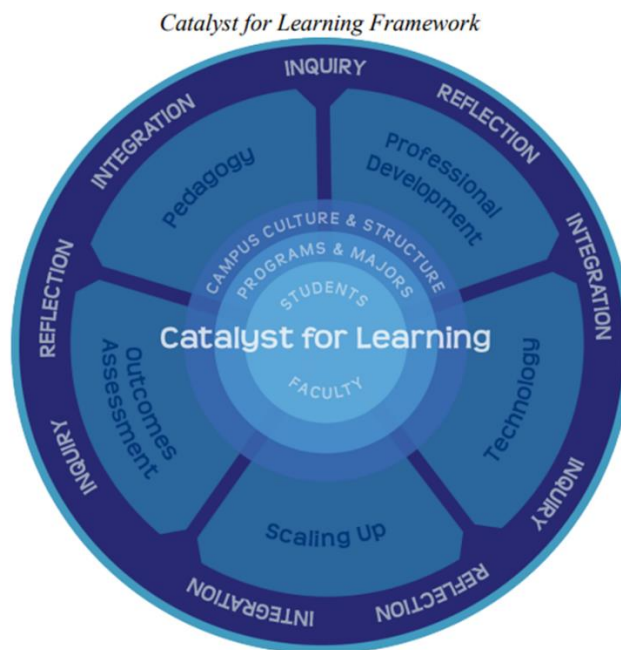


Figure 2.2. The Catalyst for Learning Framework

The catalyst for learning framework have been applied in many context, mainly in e-Portfolio integration in teaching and learning, but I will contextualised to learning and teaching of digital information skills in an academic/research library environment. Within the framework, the learning core is conceptualized around institutionalized structures such as campus mission, policy, and culture that helps to steer the condition of educational practice and learning experiences. The five interlocking sectors that inscribed the learning core are: pedagogy, professional development, technology, scalling up and outcomes assessment (see Figure 2.2.). This five sectors are brought together by three overarching and multilayered design principles: inquiry, reflection and integration. This requires educators to invite opportunities and interrogation to put the framework

into action and actions into the framework. In this respect, I applied the Framework to the context of learning and teaching DIL to students and assisting research students because these are transformative learning spaces (Pitts & Lehner-Quam, 2019). With the same tool, it provided me with a context in which knowledge practices and disposition found in the ACRL Framework for Information Literacy.

3.3.1 Constructivist learning theory

Constructivism is the theory that says learners construct knowledge rather than just passively take in information. As people experience the world and reflect upon those experiences, they build their own representations and incorporate new information into their pre-existing knowledge (schemas). This is useful in learning DIL because students construct knowledge by the way they experience the world, and build that knowledge and incorporate it into their pre-existing knowledge. This I do by encouraging students to be open minded and reflect on their social environments and what they encounter every day in digital platforms. The passive view of teaching views the learner as ‘an empty vessel’ to be filled with knowledge, whereas constructivism states that learners construct meaning only through active engagement with the world such as real-world problem solving. Information may be passively received, but understanding cannot be, for it must come from making meaningful connections between prior knowledge, new knowledge, and the processes involved in learning

3.4. Learning and teaching philosophies at WHTC: Rainfall teaching process

Adopting modern technologies has proven to facilitate high education in Namibia. Modern teaching approaches such as the Constructivist approaches are used in online teaching and learning, tools such as discussion forums, and blogs can enable students to actively construct knowledge. While students are engaging in these platforms, the lecturer facilitates and prompts the discussion. In the constructivist classroom, the teacher's role is to prompt and facilitate discussion for the smooth running of teaching and learning.

Learning is a necessary part of each individual's growth and development and should, with the assistance of the lecturer and the ideal teaching strategies, result in teacher directed study (Hughes and Quinn (2013), and in case of WHTC, there is a need to move away from the traditional culture of teaching and adopting technology for the health sciences education. Modularisation, distance

and flexible learning and the call for technology to meet these new learning needs have all had an impact on HEIs.

The dominant teaching strategy in WHTC departments is the teacher centered approach. I call this a rainfall process, where the teacher just come to class and present the lesson, and I say I was that king of teacher, because that was the culture I found in the institution. The lecture transmit information to a number of a students, with the teacher doing most of the talking and the student mainly listen or take notes during the lecture. However, over reliance on lectures may lead to dependence on the part of the student, who expect all the information to be handed to them on a silver plate. Although this teaching approach have many advantages such as efficiency and student motivation, it poses a challenge to the learning and teaching in HEIs, specifically to digital information literacy teaching which advocate for lifelong learning. This is because in many cases, lecturers do not cater each student needs (inclusivity in higher education) and students may lack interest the lecture.

During unforeseen circumstances and the lecture is not present, students cannot learn. At WHTC, during lock down both student and staff suffered because they have been heavily relied is approach. Some students dropped out because they cannot keep up on their own, they were not made to be responsible for their own learning. Some students GPA dropped dramatically. This teaching strategy has hindered learning and teaching at WHTC, thus, experiencing this difficulty it was important for me to study an understand students as presented in the next section.

3.5. The concept of learning domains and information literacy

Profiling information literacy for students requires one to understand the concept of students learning domains such as the cognitive, affective and psychomotor domain. A related premise is that information literacy is a complex form of inquiry-based learning requiring critical thinking, problem-solving and domain knowledge (Thompson & Lathey, 2013). Cognitive development research offers insights into the information literacy problems experienced by first-year and later-year students. These ‘positions’ reflect a person’s ‘assumptions about knowledge and value’ and how the person has ‘construed his experience in different areas of his life at different times’, or, in more gender-neutral language, the dominant ‘position from which a person views the world’ (Prince, Becker, Clark & Collins, 2011).

The affective domain is an important aspect of the instructional process in that it addresses the students' motivation, their involvement in the learning process, their experience of self-actualisation and discovery, and their feelings in context of the library environment (Schroeder & Cahoy, 2010). Personal development relates to the affective development of students, as they learn more of the content and skills, they become more professionally mature and less emotionally involved, and they can assess a situation objectively (Meyer & Van Niekerk, 2017). To understand the student I am working with, I profiled their information literacy skills in order to give me a clue on where they are currently in terms of digital information literacy skills landscape.

It is important to take the learning styles in consideration when creating and delivering library instruction. Degreve, Fritts and Stock-Kupperman (2007) argued that the development of the instruction sessions and tools should meet the needs of students at their level and should incorporate variety of learning theories to be most effective for all students. At first, before the PDHE, my instructions were done in a night prior the orientation without the consideration of students let alone their profiles of information literacy skills. Whilst literature suggest that, librarians should be guided by learning theory to shape their approach to instruction sessions and the development of instructional tools. The ACRL Framework for information literacy framework became an important tools and guideline to me, to incorporate into my plans and practices.

3.6. My new digital information literacy learning and teaching approach

Although I am no more working directly with students, I am working with researchers, this is what I manage to introduce at WHTC. From the department of Library and information services, digital information literacy skills, I now foster the instilling of skills of searching strategies in students. Students do the most of the works, they work in groups, ask questions and come up with scenarios that they have met during their day to day teacher centered interactions. We do this in order to produce the cohort of lifelong learners who can carry out an independent research. My wish as an academic librarian is to mold students' lifelong learners rather than imparting knowledge into them, as well as creating the library that is an agent of learning rather than simply a provider of knowledge institution.

This process facilitates learning because students are more interested in learning activities when they can interact with one another and participate actively, such as shearing articles within

Mendley or any other software's they use when they are referencing their assignments. Through this process, as a librarian, I can clearly say leaning has taken place and I did not just transferred knowledge from my head to students. As a librarian I will not be overwhelmed when dealing with such students because my work is just to guide students and they start carrying out their own referencing and searching independently. Laurillard (2002) argued that learning must be situated, in the sense that the learner is situated in the situation. This is because learners also bring their experiences and take from these experiences in relations to the particular context. Laurillard expresses her dissatisfaction with the idea of formal knowledge, and with the computational models of mainstream cognitive psychology.

Teaching information literacy or research methodologies to students using a student centered approach, helps students become independent researchers. Whilst using a teacher centered approach, hinders the process of learning because students tend to memorise the concepts rather than knowing the research concepts, yielding bad results and low quality research outputs. Student centered approach is the ideal approach I am proposing to be used in all departments, just in case all this change drivers comes way long to the core of the institution, we can still remain in the academic business.

It must also be understood that, currently digital information literacy skills are no more bounded to tick boxes were researchers or students tick which skills they think they possess more than the other. This has been the process throughout the centuries and it was the one I have been using as well. I came to realise that, learning is constructed by internalising the content in order to reshape and transform information, meaning students have to go through a morphogenesis process and change their information seeking behaviors. This ties in well with the behaviorism theory, when students or researchers acquires new knowledge or behaviors of searching for information independently and making sound judgement on what to digest and use without a guidance from a reference librarian.

3.7. Conclusion

Laurillard (2002) further argue that, because academics are concerned with how their subject is known, teaching must not only simply impart decontextualised knowledge, but must emulate the success of everyday learning by situating knowledge in real world activities. The idea of teaching digital information literacy skills to students is to make their learning possible in the highly

digitilised world, thus the need to put the student at their center of their learning. Since teaching is essentially a rhetorical activity, seeking to persuade and negotiate our agency with students to change the way they experience the world through an understanding of the insight of others. Thus, employing experiential learning with formal knowledge helped me as an academic librarian to achieve the student centered approach.

In addition, raising curiosity in student will keep them motivate. As an educator, I have to create a certain ideal learning climate through formal and informal interactions with students, which establishes how we and our students feel about learning.

4. NEED ANALYSIS TO INFORM AND IMPROVE INFORMATION LITERACY CURRICULUM FOR FIRST YEAR STUDENTS AT WELWITCHIA HEALTH TRAINING CENTRE

4.1. Introduction

Information handling is at the heart of the research process across all disciplines in an institution. Information literacy has been defined in a variety of ways; some definitions focusing on the role of information technology whilst others emphasise the importance of taking a broader view. ALA Association of College and Academic Libraries (2000) defined Information literacy as a set of abilities requiring individuals to “recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. Information literacy is a key component of, and contributor to, lifelong learning. Information literacy competency extends learning beyond formal classroom settings and provides practice with self-directed investigations as individuals move into internships, first professional positions, and increasing responsibilities in all arenas of life.

4.1.1. Information literacy as an integral part of the university teaching and learning

Information literacy is the integral part of any university library. Information literacy is directly associated with both academic performances and standardised ways of accessing and assessing information in academic institutions (Castañeda-Peña et al, 2015). At Welwitchia Health Training Centre Campuses, it has had varying level of success depending on the size of the classes, the access to devices, the time provided and the frequency of the training sessions. Information literacy is not included into the curriculum of most of the programmes at the institution. The standard practice in our context has been once-off sessions offered to students at the beginning of an academic year. This is targeted to different courses and disciplines.

The ultimate goal of an information provider is to satisfy the user information needs. That is, to provide the user with the right information, at the right time, through the right means. A prerequisite for developing personalised services is to rely on user profiles representing users' information needs (Amato and Straccia, 1999). Once you get to know who you are working with as an academic librarian, it gives you a clear direction of what to prepare with regard to information literacy instructions manual.

Much research carried out within the higher education sector, based within both distance learning and campus-based institutions, indicates that student retention and progression is based upon a complex mix of institutional, personal, and biographical factors (Baxter, 2012). Baxter further opined that, study structures and the ways in which students ordered their lives around the need to study linked to both personal characteristics and strategies learned from interaction with other students and feelings of integration with student communities through online forums or other social networking applications outside of university control.

A study carried out in Australia University on embedding information literacy in a curriculum found out that undertaking the information literacy quizzes resulted in a statistically significant improvement in students' information literacy skills from the pre-test to the post-test (Price, Becker, Clark, & Collins, 2011). Differences between students' understanding of subject content influenced how they searched for and used information. Differences in students' experience of information seeking and use influenced both how they searched for, and used, information and what they learned about content (Thompson & Lathey, 2013). The best way of getting to know about users and their information needs is to carry out periodic user studies, which enable libraries to determine exactly how and in what direction they should develop in order to meet those requirements (UNESCO,1987).

The demands of literacy education are further heightened by the technological advances, information society and the high demand for dependence on information (Tandwa, 2007:31). In the case of information checkers, the family background tends to help them to orient their searching information practices. In this case, databases and reliable information sources play an important role because information must be duly verified in any searching task, for this profile (Castañeda-Peña et al., 2015). In a 21st century academic library, skills have become a major requirement for accessibility and use of library. Everybody needs information whether skilled or not. Users profile are now determined along that line. Without ICT skills, it is not possible to make effective use of the library except a third party is involved (Anyira, 2011). At this juncture, this is where the librarian comes in to help students with their information literacy needs provided that the librarian understands the students' differences with regards to information literacy.

The growing number of University students, the increase in study programmes coupled with paradigm shifts, the increase in research and the rapid ICT developments have all changed the

routines of traditional academic librarianship (Mmusoke, 2007). These changes and demands, therefore, need an innovative librarian, who by using various initiatives, networks and collaborations, would try to meet the never-ending needs of University library users. The universities should emphasise on educational programs that help develop their students' lifelong learning and information literacy behaviours, at bachelor, master and doctorate levels and this should be another education aim and graduate outcome of universities (Solmaz, 2017).

A librarian needs training skills to be able to train users in various ways e.g. information literacy/bibliographic instructions/user education, and use of new technologies. Viewing information literacy as an integrated literacy, encompassing affective learning, technological literacy, and critical thinking, can provide avenues for greater collaboration with faculty in support of effective student research assignments (Mmusoke, 2007, Schroeder & Cahoy, 2010).

4.1.2. The concept of learning domains and information literacy

Profiling information literacy for students requires one to understand the concept of students learning domains such as the cognitive, affective and psychomotor domain. A related premise is that information literacy is a complex form of inquiry-based learning requiring critical thinking, problem-solving and domain knowledge (Thompson & Lathey, 2013). Cognitive development research offers insights into the information literacy problems experienced by first-year and later-year students. These 'positions' reflect a person's 'assumptions about knowledge and value' and how the person has 'construed his experience in different areas of his life at different times', or, in more gender-neutral language, the dominant 'position from which a person views the world' (Prince et al, 2011).

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4.1.3. Rational of the study

The researcher is a librarian at Welwitchia Health Training Center, responsible for overseeing 4 campus libraries but stationed in Windhoek, Lafrenz Campus. The researcher is responsible annual

or once off information literacy sessions during orientation workshops for students from different departments, namely, Nursing Department, Pharmacy department and Environmental Health Department. As a professional librarian, and not a subject expert in all these fields offered at WHTC, understanding students and profiling them was a better strategy in order to cater for all students regardless of their differences. In order to plan information activities that include provision for system development, it is therefore necessary to have a precise knowledge of the needs of potential as well as actual users and to understand adequately, recognise and identify in appropriate form their information requirements.

The purpose of this research was to establish the baseline information literacy of incoming postgraduate research students, which in turn could inform the development of information literacy provision to support learning and teaching as well as research at WHTC.

4.1.4. Objectives of the study

The main objective of the study is to profile the information literacy skills of the students at Welwitchia Health Training Centre. It is therefore supported by the following sub objectives:

- To ascertain student's reading culture and frequency of using library platforms.
- To determine how student access ICT for learning purposes
- To determine the preferred training style for information literacy skills.
- To suggest practical ways to improve the students' information literacy skills

4.2. Methodology

The study employed the quantitative approach to profile information literacy of WHTC students. The researcher collected evidence through the following channels: a literature review; an online survey of students. By drawing on these varied sources, the aim has been to develop students information literacy profiles. The questionnaires have been used in amongst a range of different categories of users. They are a useful resource for universities wishing to profile user behaviour. Such questionnaires can generate a descriptive profile of user behaviour amongst a user community (Rowley, 2003). The online survey was made using Google forms and distributed via emails and a social platforms through the Head of Academic Departments at Welwitchia Health Training Center across 4 campuses.

In order to obtain a representative sample of the target population of students at WHTC, a convenience or accidental sampling technique was used to select 104 students hailing from all 4 campuses. Students were provided with written informed consent for their voluntary participation, and confidentiality was guaranteed. Moreover, the researcher ensured the validity of the consistency of the data by checking that the questions asked were derived from themes emanating from the objectives of the study.

4.3. Findings and Discussions

The chapter presents data and findings that emerged from the study. A description of research participants is given in order to understand the sources of data for this study

Demographic Information

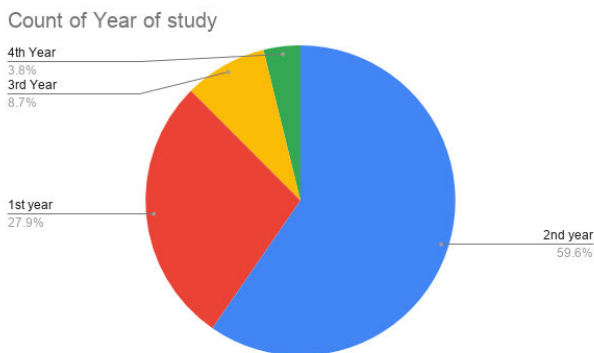


Figure 4.1: Year of study

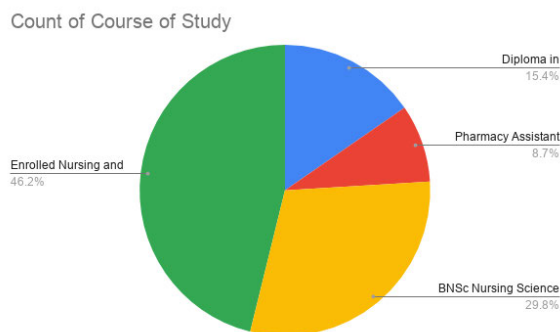


Figure 4.2: Course of study

From the background information, Figure 1 shows the participants year of study, of which the majority who participated were second year's (59.6%), first year students (27.9%), 3rd year students (8.7%) and 4th year students (3.8%). The participants were also asked to indicate their course of studies as represented by Figure 2. Students who are studying Enrolled Nursing and Midwife Certificate made up the big number (46.2%) of participants, followed by Bachelor of Nursing Science (29.8%). Students who are studying toward a Diploma Environmental Health Sciences were (15.4%) and the Pharmacy Assistants were (8.7 %). It was so vital to profile the year of study and course of study of students because information literacy skills are helpful to everybody, especially students, in order to succeed academically and in their future job opportunities. These data provides the opportunity for an evolution of library services in the area of instruction (Carlson et al, 2011).

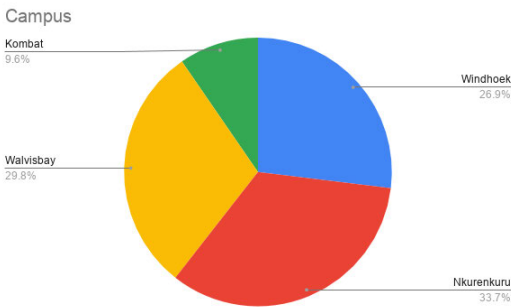


Figure 4.3: Campus

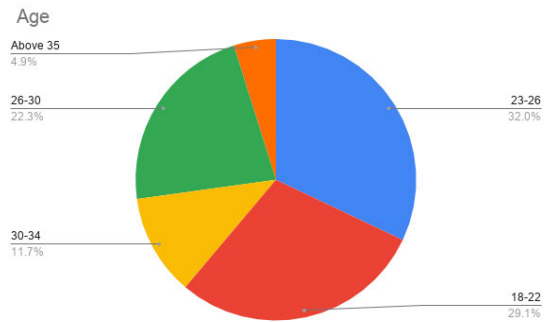


Figure 4.4: Age

Participants were asked their campus, Figure 3 shows that 35 (33.7%) are from Nkurenkuru, 31(29.8%) are from Walvisbay, 28(26.9%) are from Windhoek and 10 (9.6%) are from Kombat. Participants were also asked to select their age ranges which varies from 18 years of age to 35 and above. Participants who participated in the study were as follow as presented in Figure 4, those who were 18-22 years of age were 29.1%, those who are between the age of 23-26 years of age were 32% and they made up the large section of the participant in this age category, 22.3% were those between the age of 26-30, 11.7 % were between the age of 30-34 and 4.9% were those above 35 years of age. Knowing the campus where a student is hailing from gives a clear direction to the librarian. Dorner (2017) indicated that, the dimension of age is vital, because targeting the university students, who according to Dorner, are largely emergent adults. These individuals are in that period of life after their secondary schooling when they are entering into married life and parenthood or other responsibilities that they have to attend to apart from academics. Students are becoming more individualistic on how they attend to tasks because they are expected to be self-reliant due to globalisation.

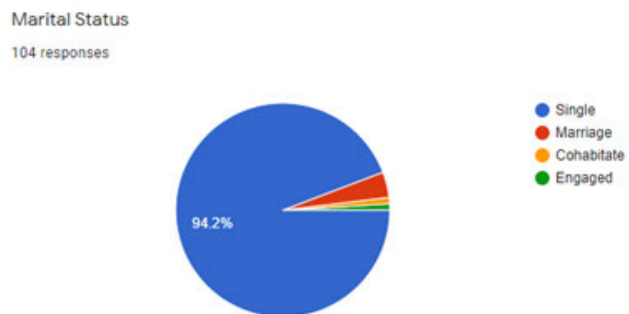
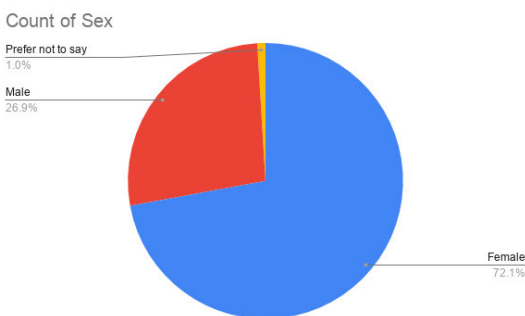


Figure 4.5: Sex

Figure 4.6: Marital Status

Participants were also asked to select their sex as presented by Figure 4, 72.1% were female, 26.9% were male while 1% prefers not to say their orientation. Sex has a significant influence on learner's willingness and ability to respond to and make use of the teaching-learning situation. It is of a major importance during designing and implementing education programs to meet the needs of an increasingly unique population of students. To effectively provide quality information literacy training, one need to understand the differences as to how males and females , act, react and perform in situations affecting every aspect of life (Bastable, 2008:287). It was also of great importance to know their marital status, as presented by Figure 6, 98 (94.2%) were single, 4(3.8%) were marriage, 1(1%) was engaged and 1 (1%) was cohabitating.

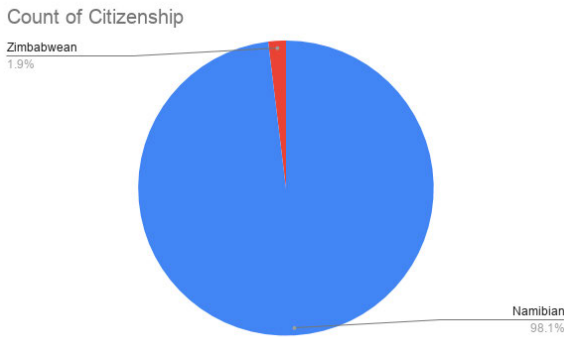


Figure 4.7: Citizenship

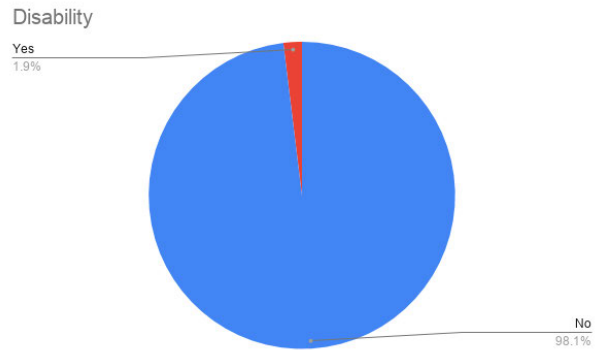


Figure 4.8: Disability

Figure 7 shows that 94 (98.1 %) of the participants are Namibian and 2(1.9%) are Zimbabwean nationals. In terms of background information, students were also asked if they have any disability or not, Figure 8 shows 94 (98.1%) indicated that they do not have any disability and 2 (1.9%) indicated that they do have a disability.

Reading Background

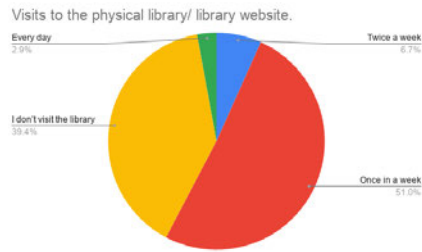


Figure 4.8: Frequency of library visits

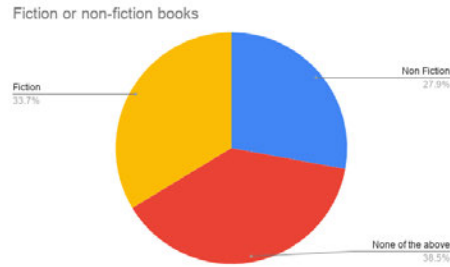


Figure 4.9: Preference of fiction or non-fiction books

To determine the reading culture of students, students were asked the how frequent they do visit the physical library or the virtual library. Figure 8 presents the frequency of the visits by the student, 53 (51%) of students visit the library once a week, a significant number of 41 (39.4%) students do not visit the library at all, 7 (6.7%) visits the library twice a week and 3 (2.9%) students visit the library everyday. Students were also asked to indicate their preference between fiction and non-fiction books. Figure 9 shows their preferences of which 40 (38.5%) prefers neither fiction nor non-fiction, 35(33.7%) students prefers fiction books while 29 (27.9%) students prefers nonfiction books. It is a well-known fact that reading fosters creative thinking, builds inquisitive minds and enhances lifelong learning abilities of a person (Bulgurcuoglu, 2016). Wema (2018) reported that reading culture among students with regard to books is still low among students.

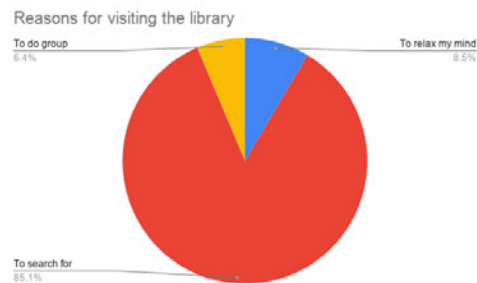


Figure 4.10: Reasons for Visiting the Library

Students were also asked to state the reasons why they visit the library. Figure 10 shows that 80 (85.1%) of students visit the library to search for information, 8 (8.5%) of students visit the library to relax their mind, 6 (6.4%) of students visit the library to do their group assignments and 0 (0%)

of students visit the library to meet with friends. Students were asked to indicate the gadgets they own.

Students were asked to describe their reading culture. Most of the students eluded that they do enjoy reading, some for the purpose of general reading and for course work or examinations.

....I read when I am home at a quiet environment and I do not like reading when there is people making noise.

My reading culture is habitual and I regularly read books and information materials at home...

I do not really have hard copies of books thus I often opt for reading material online or downloading ebooks or apps that relate to the topic I want to gain knowledge on.

I read online novels in my free time because there's no physical library where I am but then again, I also prefer reading books related to my field of study to get more insight on it.

I usually finish one book in a month, I only read, when i studying or searching something.

I barely read. Times of reading is when I want to know something that I failed to understand or I have exams

Reading while listening to music.....

I do not like reading.....

Wema (2018) presented the same comments from the students and to many students, despite being engaged in various reading activities, challenges such as too much academic work, limited internet connection and family responsibilities are among others, that constrain their reading habits.

Access to ICT for learning purposes

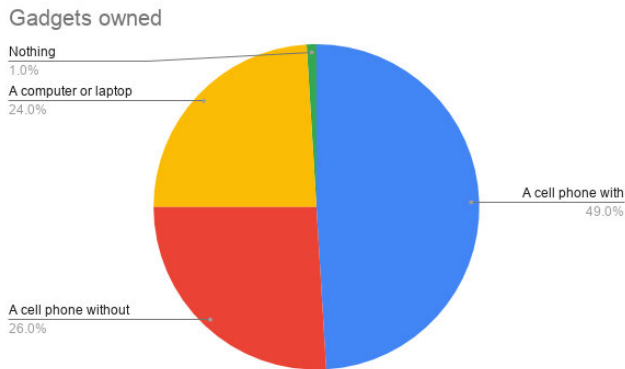


Figure 4.11: Gadgets owned

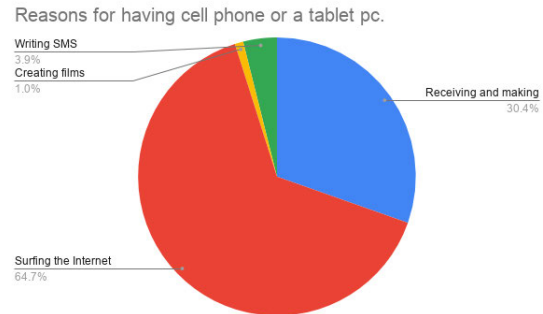


Figure 4.12: Reason for owbning a gadget

In order to understand students' access to ICT for learning purposes, they were asked the gadgets they own. Figure 11 presents these results: 51 (49%) of students own a cellphone with internet access, 27 (26%) of students own a cellphone without an internet connection, 25 (24%) of students own a computer or a laptop, and 1 (1%) owns nothing. Students were asked, in case they own a cellphone or a laptop, what they would use it for. Figure 12 shows that 66 (64.7%) students would surf the internet, 31 (30.4%) students would receive and make phone calls, 4 (3.9%) students would write SMS, and 1 (1%) student would create films.

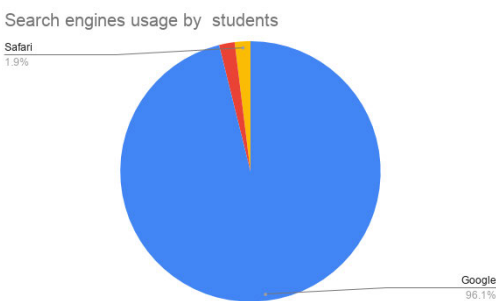


Figure 4.13. Search engines used by students

After finding out how students use their gadgets, they were asked to select the search engines they use for searching information online. Figure 13 shows that 101 (97.1%) students use Google, and 3 (2.29%) use other search engines. Mmusoke (2007) reported that Google is 'the source' of information on the Internet; and yet many times Google users complain that their searches waste their time as hundreds or thousands of records are retrieved and many are not authentic, therefore

librarians have had to conduct information searching and retrieval sessions to guide library users on how to identify reliable and quality sources of information on the Internet.

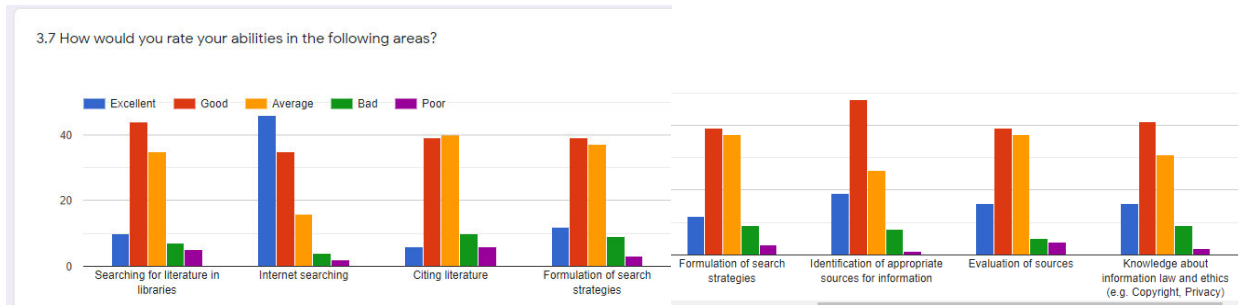


Figure 4.14. Abilities in Information Literacy skills

Students were asked to rate their abilities in different information literacy skills. Figure 14 represent their abilities. In searching for literatures in libraries 10(%) students indicated they can search effectively, 46 (%) can (...). The ability to recognise a need for information, to critically evaluate information and its sources, and then to use that information effectively in order to construct new concepts or create new understandings, is now a fundamental part of HE classroom practice during which contemporary HE students increasingly engage in dialectic processes in the quest for effective learning (Wakeman, 2011). Furthermore, in terms of local and national culture, the information literate person is a self an socially conscious being, rather than a simple repository of skills and knowledge. It is not only about the skills that matters but how to use these skills to function in a highly contextual information landscape (Dorner, 2017).

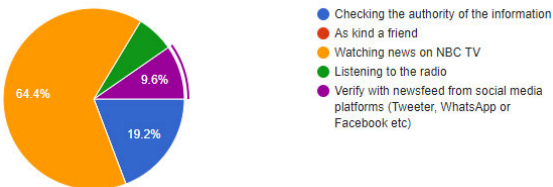


Figure 4. 15: Information Evaluation skills



Figure 4.16: Ability to dish out information

Preferred Training Style

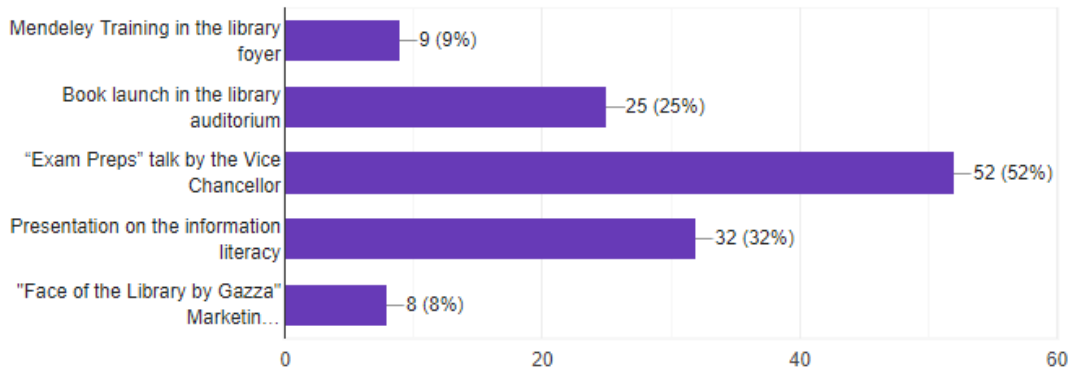


Figure 4.17: Preference of attendance to library marketing events

Results presented by Figure 17 shows the preferred learning style. The event scenarios symbolises the learning styles that the students would likely to prefer with regards to rolling out the information literacy skills. This includes marketing campaigns coupled by influencers, presentations, motivational talks and trainings. Students were presented with different events that they would prefer to attend than the other that were running concurrently on campus or virtually. A high number of students 52 (52%) indicated that they would learn more if the attend the Examination preparation by the Vice Chancellor (Rector), 32 (32%) of students indicated that they would rather attend a presentation on information literacy, 25 (25%) of students selected the book launch in the library auditorium, 9 (9%) of students preferred to go to a Mendeley training in the library foyer while 8 (8%) of students preferred to go to the Face of the Library By Gazza marketing campaign.

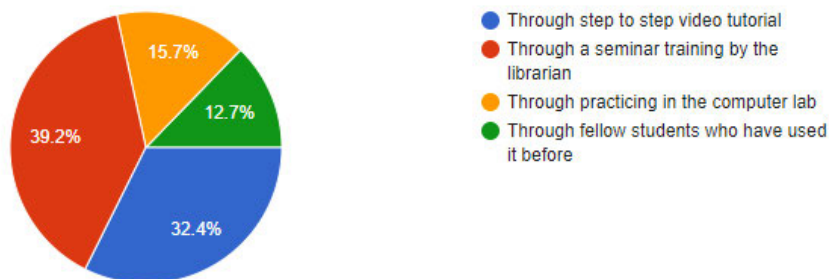


Figure 4. 18: Preference of ways of leaning a new system.

Lastly, students were asked to indicate their preferred learning ways of learning a new system. A high number students 40 (39.2%) indicated that they prefer learning through a seminar training by the librarian, 33 (32.4) preferred to learn through step by step video tutorial, 16 (15.7%) preferred to learn through practicing in the computer lab and 13 (13.7%) preferred to learn through fellow students who have used the new system before.

4.4. Conclusions

From the demographic findings, the report provides data regarding the students and this will help the librarian to better understand the diversity of students for information literacy purposes. To ensure inclusivity and diversity in providing the tailor made trainings, all the demographic information is a useful tool to understand the diversity of students. The findings also revealed that the reading culture is very low and the frequency of visiting the library platform are very low. Perhaps this is caused by the heavily reliance on lecture notes and printouts as well as the library operating hours which is not favourable to many students. Students indicated that they do not really visit the library platforms or the physical libraries and prefer to do other things rather than visiting the library. The findings from the study revealed that students prefer learning through different learning styles of which motivation was the dominant learning platform that most of the student opted for. Acquiring critical thinking skills from information literacy training is necessary in enhancing reading habits of students for it encourages them to educate themselves through reading, analysing, synthesizing and interpreting world events correctly, and by obtaining the right information that eventually helps them throughout their lives (Wema, 2018).

4.5. Recommendations

In light of the findings, the following recommendations were made, in order to help out students better, in terms of developing their information literacy. The information literacy skills should start at the foundation, just like other core Institution modules' such as Computer literacy, Contemporary Social Issues etc. It will be of great importance if including information literacy skills in the Institution's curriculum so as to attract students to the library. The Librarian have to play the role in cultivating and maintaining reading culture among students by creating conducive environments and acquiring resources that match with the ever-evolving academic reading practices. Library staff should strive to revive and strength all the services in the Library so as satisfy user's information needs for learning and research. This will enable most of the student to be competent in the above areas showing the competency of students. It is also recommended

among others that the habit of using the Library should be inculcated into students through avenues such as organizing library display, library exhibition, library orientation.

5. PERSPECTIVES ON DIGITAL INFORMATION LITERACY CURRICULUM

5.1. Introduction

Curriculum is a dynamic field and many authors defined curriculum in different ways. Curriculum is defined by Meyer and Niekerk (2017) as the plan or outline of a course of study; it is scientific, accountable written document containing selected, ordered and evaluated content, as well as the didactic consideration that are instrumental to the realisation of the set and selected outcomes of the study course, as presented by the institution, and accredited by relevant accreditation authorities. Curriculum is also typically defined as a process of making decisions about educational goals and how best to achieve them (Roberts, 2015). Fomunyam (2014) argues that curriculum is a series of potential experiences organised in a school for disciplining students in ways of thinking and acting. This means that the curriculum centres on what students are supposed to take away from teaching and learning as well as what they can or should do with what they take from the curriculum.

Although there are many definitions on curriculum, for the purpose of this essay, the holistic definition of curriculum by Fraser and Bosanquet (2006) will be used. Fraser and Bosanquet (2006) conceptualise curriculum in four distinct categories of descriptions as follow: Curriculum is the structure and the content of a unit; the structure and content of the program of study; the student experience of learning; a dynamic and interactive process of teaching and learning. The first two part of the definition conceptualise curriculum as a product, that can be defined and recorded on paper and this focuses more on what an individual teaches or may include the whole programme that is undertaken by students. The third part of the definition conceptualise curriculum as a process and structure that enables students learning. The last part of the definition views the curriculum as a dynamic, emergent and a collaborative process of learning between teachers and learners.

The reason for writing this chapter is to share some personal experiences and to foster dialogue within the digital information landscape in academic and special libraries. Another aim is to negotiate my agency toward the establishment of digital information literacy curriculum in High Education institutions. This dialogue specifically aimed to foster the collaboration between the

academic librarians and different faculties or relevant directorates to be the drive behind the incorporation of DIL into the micro and macro curriculum.

5.2. The context of Information literacy skills curriculum

The constant change to the information landscape has influenced learning which has become a continuous process, and lifelong learning emerges as key graduate attribute in the 21st century. In the previous chapter, a glimpse into different profiles of students are explored, and this is a good tool to inform our learning and teaching as well as our curriculum. Change in pedagogy necessitate an attitudinal change on the part of an educators. The role of an educator have moved from being a disseminator of information in the classroom to being a facilitator empowering students to become autonomous learners through resources based learning outside of the classroom. Education is now a liberator than a domesticator, in the liberation paradigm, information is critical to facilitate collaborative learning.

According to Singson and Lungdim (2012), the amount and complexity of information with which students have to deal is growing by leaps and bounds. As a result, no course of study, especially in higher education, is adequate unless it helps to develop students' ability to deal with the rapidly increasing information in their fields. This then make digital information literacy a complex subject to deal with, especially to librarians who are teaching digital information literacy skills without any educational pedagogy knowledge because this is an ever evolving concept. Association of College and Research Libraries (ACRL) believes that developing lifelong learners is central to the mission of higher education institutions. By ensuring that students have the intellectual abilities of reasoning and critical thinking, and by helping them construct a framework for learning how to learn, colleges and universities provide the foundation for continued growth throughout their careers, as well as in their roles as informed citizens and members of communities.

For these skills to happen they can not only happen in a one shot programme through the entire journey of the student, but by fostering the culture of DILs in HEIs. This will also be possible if librarians are in their rightful places to teach this important skills and be the agent of change in advocating for DILs in this technological advanced era. In my own practise, I realised that the challenge was 'what to teach', 'how to teach it', and 'when to teach it'. This was what Raju (2021) terms to as hybridisation of competencies. The traditional local curriculum of librarian did not

prepare librarians to be teachers, therefore they are challenged when they come into practice. This then requires the hybridisation of competencies in-order to advocate DILs to be include in the macro curriculum.

5.3. Stakeholder's involvements and engagements in curriculum activities

Stakeholders are individuals or institutions that are interested in the process of curriculum development and implementation. Stakeholders can be categorised in different in groups such as students, institutions in the industry, academics and the general public, they shape the way the curriculum development and implementation process is carried out. Their interests vary in degree and complexity. They get involved in many ways in the implementation, because the curriculum affects them directly or indirectly. Due to different forces that might affect the teaching and learning both globally, nationally and locally as highlighted in the first chapter, curriculum can be greatly influenced by many changes happening in our society, thus the need to consult the stakeholders, before, within and after the curriculum process. Collaboration between lectures and librarians need to be strengthened.

Reflecting on my own practice, previously when I do teach digital information literacy skills, since that component is not included in the curriculum, preparing slides was more sufficient for me as long as I ticked of the class of my list and concentrate to more other things. I was more on a permissive individualism, not collaborating with those that are teaching. This created a gap between what I was teaching and what students are being taught in their other classes by the lectures. That culture was also fuelled by the fact that I was the only librarian working for the institution and some colleagues viewed me as a non-teaching staff.

Taking the role of librarians as teaching staffs, students and curriculum designers seriously call for an iterative and evolutionary curriculum design approach, with special attention for the reflection process based on experiences with the design in classroom practice. My involvement in the management afford me an opportunity to sit in the curriculum committee of Welwitchia Health Training Center. This allowed me to collaborate with the Head of Departments, lectures and IT personnel, which made it possible for me to advocate for the inclusion of DILs in curriculums in the institution. I realise this was an important journey simply because, curriculum is neither final nor static but is instead a journey that need to be travelled by all who are affected by that

curriculum. As a result of my agency and through stakeholder engagements, I manage to play my part until the DILs was added as part of the micro curriculum in the macro curriculum of Pharmacy curriculum, Certificate in Nursing and Midwifery as well as Diploma in Environment Health. Indeed it was a milestone, but the question remains, how will this micro curriculum be presented to the students, an area that need to be considered and explored.

Technology is an essential component of learning today. With digital applications, tools and resources, students can create content, interact with experts, collaborate with peers and participate in simulation activities. Personalized experiences put students at the center of learning and empowers students to take control of their own learning through flexibility and choice. With this transformation to digital learning, it is important for stakeholders share the importance of moving towards digital learning with constituents, as well as address some of the concerns that occur during the transformation.

5.4. Teaching for deep learning: Constructive alignment

There are different type of knowledge that every curriculum need to address, declarative knowledge (horizontal knowledge) and functional knowledge (vertical knowledge). Declarative knowledge sometimes known as propositional Knowledge or content knowledge referred to as the public knowledge and is subjected to rules of evidence that makes it verifiable and logically consistent (Biggs & Tang, 2011). This knowledge is in libraries, textbooks and on the internet. In this type of knowledge, the students' role is to receive the content and the student is required to declare back that knowledge back by using their own examples and words which is called receptive knowledge. When I started the professional librarianship with Welwitchia Health Training Centre, due to the culture that doesn't not know the library and what it can bring to the table, it was hard to come in the picture an start my agency of making sure that people embrace this, thus I started with offering the information literacy skills during orientation of first years, and this sorely depends on giving declarative knowledge. This did not really make any impact to students' digital information literacy skills, but I learned my lessons.

On the other hand, as defined by Biggs and Tang (2011) functional knowledge is the one that inform actions where the performance is underpinned by understanding. Student does not only receive pre-existing knowledge but is actively involved in putting knowledge to work (Biggs & Tang, 2011). Teachers use theory to inform them on what to do to in their professional context, be

it solving problems or planning teaching. Functional knowledge requires a solid foundation of declarative knowledge but it should not be in the first place. As opined by Ketterige, Fry and Marshall (2015), in deep learning approach, the intention is for students to engage meaningfully with the task, with the appropriate background knowledge and the ability to focus at a high conceptual level. Students focus on meaning and is based on desire to understand. They further encouraged that teaching can encourage a deep approach to learning by explicitly bringing out the structure of the topic, teaching to elicit an active response from students, by building on what student knows and confronting their misconceptions, so as assessments should focus on overall structure rather than independent facts.

The difference between the two knowledge structures should tell and inform what our curriculum should address. They are all important and they will have a role to play in our macro and micro curriculum and they inform our learning and teaching practices differently. Biggs and Tang (2011) helpfully suggest that the reformed curriculum should be innovative enough to meet current and evolving labour demands in the 4th industrial era. In addition, disruptive innovations in the form of rapidly evolving IT impacting academic library services have, in turn, created a need for pedagogical skills. It is therefore vital for librarians to possess both technology and pedagogical skills as critical to a digitised library environments thus highlighting hybrid or blended librarianship to develop the pedagogical knowledge and skills in teaching the use of technology in order to empower the end users of information to navigate the complex digital information environment.

Previously, I saw myself as a repositories of knowledge while students are there to obtain some of that knowledge and so teaching methods were correspondingly expository. But I realised, I am also a learner and students knows what I don't know depending on the diverse backgrounds they came from. Thus embracing the culture of diversity helps with the functional knowledge in order to foster the critical thinking skills of students. Curriculum of DIL in many academic libraries remain declarative which students often see as irrelevant and hence worthy of only a surface approach to learning, and I wondered why I didn't make any impact with my one shot information literacy programmes. It is therefore imperative that, only through engaging students in the terms of students' own experiences can an educator then build in concepts of learning that dialogues with

those experiences to create a more dynamic, empowered, liberatory educational experience (Doherty & Ketchner, 2005).

These knowledge structures need to be taken into account and locate within what Bernstein terms as the pedagogical device, which is characterised by the field of production, field of recontextualisation and the field of reproduction (Bernstein, 2000), as depicted in Figure 5.1. Bernstein's pedagogic device has been used as a framework for studying the history curriculum reform (Bertram, 2012). The pedagogic device is an attempt to describe the general principles which underlie the transformation of knowledge into pedagogic communication (Bernstein, 1996). The distributive rules of the pedagogic device produce three main fields as presented in Figure 5.1, the field of production, the field of recontextualisation, and the field of reproduction, which are involved in the production of pedagogic discourse (Bertram, 2012). The field of production is the process by which new knowledge, discourses and ideas are created and modified, usually by university academics. The field of recontextualisation is the place where there is a selection of knowledge from the field of production, and this process results in the production of pedagogic discourse.

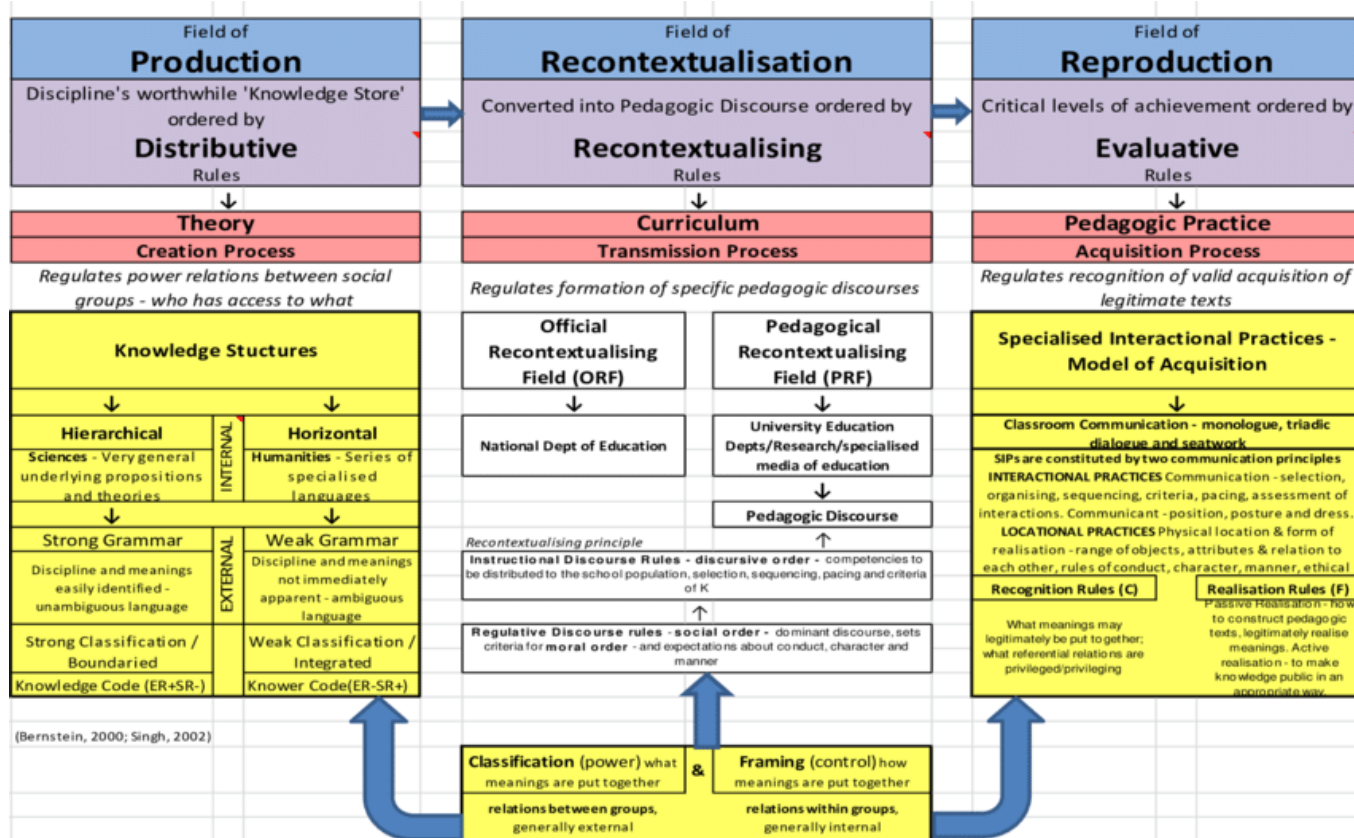


Figure 5. 1: Bernstein's Pedagogic Device

By applying the Bernstein Model helped me change my practice and the way I view the knowledge that I give out during learning and teaching of digital information literacy skills to students. In the field of research, this is where I align my teaching to what is currently being produced in the field of digital information literacy skills (DILs) re-search through different cultures and structure in academic libraries or Higher Education fraternity in general. This help with redefining my strategies and create new knowledge with regards to teaching and learning DILs to different disciplines, be it nursing students, pharmacy students or environmental health students, fellow educators of geoscientist practicing in the field. Both groups are unique and need a tailor made curriculum suiting their information needs and context. Moreover, in the field of reproduction, the PDHE, helped me with studying my own learning and teaching models, theories and practices to achieve optimal learning in the field of learning and teaching digital information literacy skills.

Consequently, this has been challenged by the institutional structures which hindered the maximum flourishing of all this knowledge I acquired through the PDHE programme. This is because, the curriculums does not support the inclusion of DILs, let alone the academic library contribution to students teaching and learning perception by the educators

5.5. Challenges facing Digital information literacy curriculum in Higher Education

The change in librarianship roles and dimensions bring new set of challenges to academic librarianship (Raju & Raju, 2012). The change in threshold concepts from information literacy to digital information literacy confronts librarians with new terminologies and things that librarians were not taught at university. This becomes a bit challenging in playing agency in designing, implementing and delivering digital information literacy curriculum in Higher Education Institutions. Librarians are now compelled to engage concepts that are directly related to principles of research, locating appropriate literature, analysing the literature to determine relevancy, reliability and veracity (Raju & Raju, 2012). Technological innovations have led to an increase in demand for information technology skills in contemporary library and information agencies (Raju, 2021). This has therefore created an increase need for pedagogical skills on the part of librarians for them to empower users with knowledge and skills to navigate a complex digital information landscape (Pieterse, Greenberg, & Santo, 2018).

5.6. Curriculum responsiveness within the context of decolonisation

Moll (2004) argues that curriculum responsiveness is the ability of curricula taught in schools or universities to address student needs as well as societal circumstances. This implies that the curriculum not only focuses on what happens in the classroom but also on what students do with what they learnt. To this end, curriculum responsiveness would address issues of employability or economic responsiveness, diverse student make up in the classroom or cultural responsiveness, the nature of underlying knowledge within the discipline or disciplinary responsiveness and pedagogical or learning responsiveness (Moll, 2004). Figure 5.2 as adopted from Moll, helpfully explains the curriculum that should be responsible to the economy, institutional culture, teaching and learning as well as disciplinary knowledge.

Curriculum Responsiveness

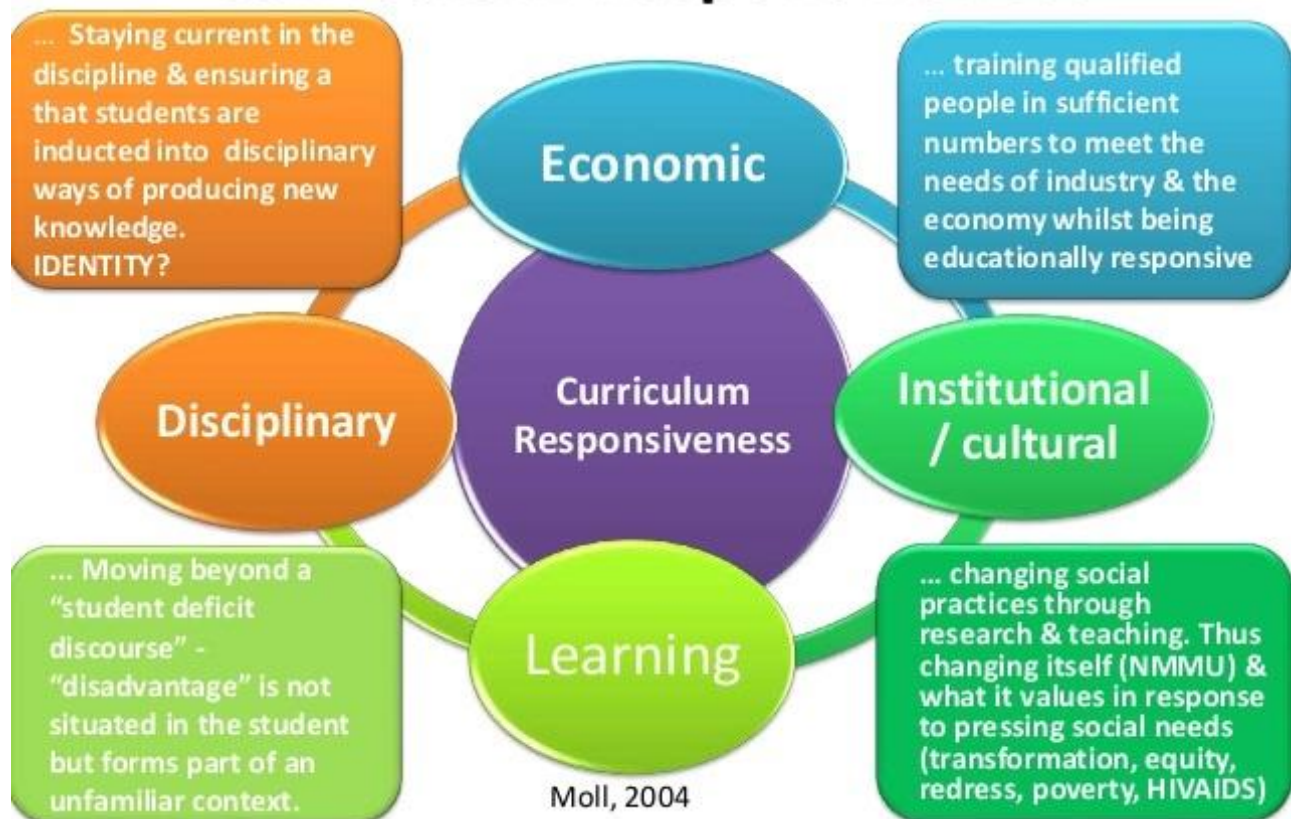


Figure 5.2. Curriculum responsiveness

According to Fomunyam and Teferra (2017), for the curriculum to respond systematically to contextual societal needs and the changing demands of globalisation and internationalisation, it must be unsettling and provoking to ensure that every stakeholder takes responsibility to make it responsive. By designing the curriculum to be provocative, the higher education system would be opened up for encounters that in effect empower scholars to think local (decolonising the curriculum) and act or respond globally. As digital information literacy skills are one of the bedrock of the 4th and 5th industrial eras, I always ask myself, when I am teaching this skills, will these student be able to fully function in the digital society and respond to achieve the United Nations sustainable goals when they are going into the practice? Curriculum need to be responsive to these need in-order to train suitably qualified people in sufficient numbers to meet the needs of key sectors of the economy.

We recently experienced the pandemic and we are still living with Covid-19, as I am teaching I am asking myself, as I teaching the students how to curb misinformation and analyse information critically so that they can make informed decisions based on facts. I will now make sure that, DILs become one of the graduate attributes (knowledge and skills) are in sync with the skills demanded by employees and professional bodies. Therefore curriculum must be aligned to culture, which is the basis of local experiences and thought to ensure that issues of patriarchy, respect of human dignity and social justice is at the core of education (Fomunyan & Teferra, 2017).Curriculum should enable students to value and appreciate diversity , and practice in their professions without discrimination and prejudice. Of which instruction librarians have a role during the teaching of digital ethics, a component in DIL, to enlighten students to be vigilant and follow all procedures when reusing others idea as or when interacting in online spaces to avoid cyberbullying.

Curriculum does not only need to respond to the societal needs an culture but it also need to respond to the institutional development guidelines, pedagogical and learning responsiveness and disciplinary responsiveness respectively. As it was highlighted before that I didn't take into account the students lived experiences as well as the pedagogical knowledge, I realised that this was the vital part of learning responsiveness. Doing the students profiling presented in Chapter 4 helped me know my students better. By presenting the profiling results to other colleagues through the library seminar helped with

5.7. Chapter summary

The micro curriculum of digital information literacy curriculum should target different skills that a 4th and 5th industrial era student will need to function in the knowledge society. Due to societal issues, DIL curriculum focuses on issues of social concerns such as miss information, lifelong learning skills and media information literacy skills, hence helping with the realisation and achievement of the United Nations Sustainable Development Goals globally as well as the National Development Program (NDP 6) and Harambee Prosperity Plan respectively.

6. ASSESSING DIGITAL INFORMATION LITERACY SKILLS IN HIGHER EDUCATION

6.1. Introduction

Assessment is defined as a generic term for a set of processes that measures the outcomes of students' learning in terms of knowledge acquired, understanding developed, and skills gained (Casey, Clark & Hayes, 2017). In the words of Suskie (2009:4) assessment is the evaluation of the quality of the education, students development and usefulness of the curriculum regarding students level of development. It can also be referred as to establishing clear, measurable expected outcomes of student learning, ensuring that students have sufficient opportunities to achieve those outcomes, systematically gathering, analysing, and interpreting evidence to determine how student learning matches our expectations and lastly using the resulting information to understand and improve student learning.

As mentioned earlier, Digital information literacy (DIL) is a critically important and necessary skill deemed necessary for success in higher education as well as in the global networked economy. These skills allows the ability to obtain, understand, evaluate, and use information in a variety of digital technology contexts. It is therefore matters how we assess the evidence of these skills, if we want them to be lifelong learners that can participate in the knowledge society. On the other hand, Assessment in any educational system ascertains the extent to which educational learning outcomes are achieved and also the extent to which students have mastered the subject matter. Educators, through assessment can determine whether students are developing desired competencies and values, or whether the curriculum provides the vital knowledge and skills of the discipline, and whether students can integrate learning from individual courses into a complete educational experience that prepares them for future careers and making them functional citizens in their communities.

The above defections are an illustration that, we can define assessment from different angles but for the purpose of this paper, the following definition is going to be used. Assessment is to evaluate the quality of the education, student's development and the usefulness of the curriculum with regards to student's level of development. Throughout the paper, reference will be made to the relevant empirical and theoretical literature on assessment using the perspective of the reflective

practitioner. This involves examining my own beliefs about assessment and how they fit in the digital information literacy skills curriculum I was involved in, and the culture of the institutions in which I have worked, throughout the course of this programme.

6.2. The context of Digital Information Literacy Skills (DIL) library instruction

The unprecedented growth in digital information and proliferation of related information and communication technologies (ICT) has impacted every aspect of our personal and professional lives. In the past, increasing advances in electronic communication have created critical concerns for academic libraries in high education institutions (HEIs) with respect to Information Literacy practices. New developments occasioned by technological innovations have introduced different challenges in the provision of information services to users. With the disruption in teaching and learning during the Covid 19 pandemic, I made library instruction available online on google classrooms to each and every intake in the institution. This was the only way to reach the students because there was no portal where students can be reached. This enable students to interact with the librarian even during between their classes with more ease. Mostly, I utilised few minutes from the library and self-study in their timetable to reach them. The library instruction was customised to different courses offered within the institution (Sparks, Katz & Beile, 2016).

6.3. Rethinking the purpose of assessment: formative, summative and sustainable assessment.

Summative assessment known as assessment of learning is aimed at summing up of achievements, usually by means of grading by percentages or a grade for certification and is mostly done at the end of the semester. On the other hand, formative assessment known as assessment for learning aims to generate feedback which is capable of being used to improve learning. This form of assessment happen during the learning activities rather than at the end of the semester or year and is used as an investigative tool to find out what the students know and can do, and to identify confusions or knowledge gaps they might have. The third type is sustainable assessment as presented by Quinn (2015), this is the assessment which focuses not only on content but also on the process of learning on how student will continue to learn after the point of assessment. This form of assessment contributes to the formation of a capable person who is able to engage in professional work and contributes to the society as an informed citizen. With digital information curriculum, with a view of it embedded in the macro curriculum, will take the form of formative and sustainable assessment.

6.4. Assessment for learning

In this section, I am going to focus more on formative and sustainable assessment. Action without feedback is completely unproductive for students. In formative assessment, the results are used for feedback during learning (Biggs & Tang, 2011). Student and lectures need to know how learning is proceeding through the semester. The basic principle of learning according to Quinn (2015) is feedback. Students need to know what they are trying to achieve and they need to know how they are close to coming to the goal. This can take many forms, such as one on one feedback between the student and the lecturer (written or spoken) or through discussions with the whole group. For assessment to be truly formative and contribute to students learning, they must receive high quality feedback on their work (Quinn, 2015).

Feedback should be aligned with the purpose of the task and the assessment criteria so that student can fully understand what they have done well and where they fall short of meeting the criteria. Macfadyen et al., (2019) found out that, the core element is an ongoing assessment of a student's readiness, motivation and individual situation. In response to this assessment, supervisors balance three functions: facilitating, nurturing and maintaining standards. In doing library instruction one is nurturing the literacy skills of student's in order for them to become lifelong learners. So librarian have a task to make sure the work force is prepared well in advance so that they will be better lifelong learners in the society. You can only nurture something when you are continually maintaining and facilitating it until you reach your target, feedback enable this.

The benefit of formative feedback is that, it benefits both parties, both the student and the lectures, because it aims to improve students learning and how teaching takes place. In library instructions there has been a trigger to change the mindset, from conception of teaching as a secondary ad hoc library task, heavily teacher and source centered, to an understanding of teaching as a core library activity that is student and learning centered (Torras, 2017). From a constructive perspective, the understanding is that learning is the process of meaning construction, learning happens by doing and reflection. This has to do with student engaging with real problem solving and learning through the feedback they are getting from their peers of the lectures.

6.4.1. Peer Observation Assessment for learning

Peer assessment or peer review provides a structured learning process for academics to critique and provide feedback to each other on their work. It helps them to develop lifelong skills in

assessing and providing feedback to others, and also equips them with skills to self-assess and improve their own work. Through peer review, I got constructive feedback from my colleague who teaches the same thing as I (see Appendix 3). The chief benefit of these assessment was that, the answer to the problems were reviewed immediately after the peer review task was completed. Through this, best practices are shared through mutual understandings and this is beneficial to students and to the person who was observed or the observer.

6.5. Assessment through the lenses of Social realism theory

A central consideration for any social theory is the conceptualization of structure and agency (Ashwin, 2009). Margaret Archer differentiates the domain of structure (the world out there) into the twin realms of structure and culture (Archer, 1995, 1996). Structure has to do with material goods (unequally distributed across society) and is also the domain of social positions and roles. It can be complementary or contradictory, therefore it can enable or constraint effective teaching and learning as well as assessment.

Moreover, working at Welwitchia Health Training Center (WHTC) as an academic practitioner, it gave me access to be involved into management issues, which also cut across, teach and learning as well as assessment. Recognizing my place in the structure of the institution enabled me to play an agential role to influence policies on moderation of examination papers. Through this module, I realised that, in responding to this enablement and containment heavily depends on depends on personal powers and properties. As the head of the Department of Library and Information Services, enabled me to participate in many decision making processes with the institution, which contributes to organizational learning.

When I started teaching Digital information literacy, there was nothing in the institutional policy or guidelines on assessment of DIL, so I have to find my ways on how to formatively assess the students. This was a hard as finding a needle in the hay stack because I didn't have a clue, but when I went through the PDHE journey, everything was smooth. To determine whether students possess the requisite knowledge and skills in DIL, higher education institutions such as Welwitchia Health Training Center must be able to administer and use results from valid assessments of DIL

The domain of culture refers to the world of ideas, beliefs, values, ideologies and theories (Archer, 1995). The domain of culture includes both the world of propositional knowledge in which two

ideas can be put in a logical relation with each other, and the world of myths, opinion and beliefs (Case, 2015). Whilst agency is the domain of human action and interaction, it influences the culture and the structure of a particular organization (Ashwin, 2009).

Given my position in the institution, the impediment when it comes to quality assessment was always the culture at the institution. Giving online assessment and examination was the first for the institution and most academicians had mixed feelings assessing the health sciences programs online. Due to the beliefs and ideologies that people had, it was difficult to manage and navigate through this change. Through various in-house trainings done at the institution, helped with lectures understanding and getting acquainted with online assessment. Due to the urgency and call for staff members to acquaint themselves to online assessment, a support committee was commissioned to help facilitate this process, of which I was involved in the committee. This was done to ensure quality and assessment validity. The principle of valid assessment was clearly underpinned by the notion of constructive alignment in requiring lectures to carefully check that assessment requirements are not only testing what they say they are testing, but are also directing students toward appropriate learning (Fry, Ketteridge & Marshall, 2015). This enhance me to play an agential role in the assessment dealings at the institution.

The three domains are interrelated, and the theory enable us to examine the extend of change that occurs or the morphogenesis (transformation). However, despite the interplay among these domains, they should not be conflated. Instead, in looking at the social world through Archer's lenses we are thus separately and then together analyzing structure, culture and agency. In the arena of higher education, we are centrally focused on the morphogenesis of student agency; we aim for students to leave higher education with different knowledge and capacity for action than that with which they entered (Case, 2015). In analyzing a situational logic we need to consider whether the different aspects of culture and structure are in complementary or contradictory relations to each other. Here we can note that complementarities in either or both the structural and cultural domains are unlikely to give rise to change.

In the arena of higher education, we are centrally focused on the morphogenesis of student agency; we aim for students to leave higher education with different knowledge and capacity for action than that with which they entered. Getting feedback from students is very much important when comes to assessment, and this plays a major role on student agency. Student agency needs to be

characterised in all its dimensions, defined by past learning experiences, existing as the power to mediate the curriculum and its constraints (Case, 2015). Since Digital Information Literacy skills aims to provide students with lifelong learning skills, these sees students involvement in assessment as moments of learning in themselves (Fry, Ketteridge and Marshall, 2015).

6.6. Assessment as an enablement and constraint to effective learning and teaching

Assessment is believed to have a greater impact on students learning than teaching because it strongly influences how student s respond to their studies (Quinn, 2015). She further argued that, assessment has a powerful effect on what students do and how they do it, communicate to them what they can and cannot succeed in doing as well as build their confidence. In reference to Gilio and Quinn (2019), assessment has a greater impact on student learning than teaching and it strongly influences how student respond to their studies. Assessment design is concerned with pedagogic philosophy, disciplinarily, models of assessment and what we know about ways students learn. In other words, it is assessment to influence learning. Assessment as feedback is focused more on practices to improve student learning.

According to Australia and New Zealand Information Literacy Framework (2004), the responsibility of educators promoting information literacy learning is to engage in best practice in all areas of teaching and learning. The most effective strategy for ‘embedding information literacy into the total educational process’ starts with incorporating best practice assessment where:

- ❖ Digital information literacy is included in the objectives and learning outcomes of units of study and assessment tasks,
- ❖ Digital information literacy assessment is designed to structure and sequence a complex task e.g. the staged essay with an annotated bibliography, peer reviewed essay draft, final essay and reflections on how the essay could have been improved
- ❖ Digital information literacy assessment is planned and sequenced throughout the entire degree providing a developmental framework
- ❖ a variety of methods of assessment for information literacy learning are used

Aligned assessment is the most powerful tool available to educators to direct and facilitate student learning. It is therefore essential that digital information literacy learning outcomes are embedded in the assessment tasks for courses of study.

On contrary, Australia and New Zealand Institute for Information Literacy (ANZIL) (2004) revealed that assessment can enhance and facilitate learning, but it can also be a barrier to learning. It is possible that certain assessment strategies can limit students' experience and create an environment where students resort to surface approaches to learning. Assessment can undermine students confidence if it is done poorly hence impacting the quality of learning and teaching process in HE

6.7. Implication of institution type on the assessment design

WHTC is still a small institution and lacks policies on assessment. Through the Examination and Assessment committee that was commissioned, the hope is that they will come up with solid policies on assessment. Currently, although there might be some rules and regulations, the assessment practices do not agree with what is written on the rules and regulations. In the absence of complete policies and regulations to guide in formative and summative assessment, assignment good practices can always be employed while the policies are being developed. In quality, they always say, you have to do the right things first.

For quality assessment in library instruction, the librarian need to align the assessment to the whole programme learning outcome. Good assessment should be scaffolded across the whole of degree, aligning explicitly with degree, diploma or certificate level learning outcomes. Another important aspect in assessment is balance. Course assessment design have an appropriate balance of summative and formative assessment tasks. Due to the nature of library instruction, the current practice only allows formative assessment, and no summative assessment is done. The core courses that include the aspects of DIL assess summatively, but it is difficult to get feedback from those that teach those core courses such as Information Technology, Computer Literacy and English for General Communications, this then call for collaborations of librarians and faculties and departments to discuss modalities as to how we as librarians can improve the assessment strategies in DIL. The question now lies into how to come together as team and make sure that summative assessment also capture the library content taught in those modules. At this juncture, not all courses have modules that contain library instruction, and this is the gap that is currently exists in the institution.

For good assessment purposes, the library instructors must also ensure that instant feedback is provided to students. Assessment will involve an engaged process that begins with clearly

articulated criteria but should extend to active discussion that facilitates students taking ownership of criteria and standards for their assessment.

Assessment need to be developed and designed to foster student learning. Tasks should have a positive impact on student behaviour and build an approach that develops sustained and self-regulated learning. Good assessment design ensures: authenticity; validity; equity; relevance; integrity; transparency; and appropriate effort. This could only be achieved when course conveners and subject coordinators will assure assessment is consistent, referenced to agreed assessment rubrics and grading decisions are moderated and calibrated between markers and evaluators.

6.8. New approaches

In the past, live instruction is time constrained with limited options for real interaction. Non-live instruction is static with no interaction options. Library instruction is interactive (including quizzes, response prompts and applied learning activities) and it is always available online. Static instruction and time-constrained group instruction limit the ability of library instructors to pose questions, evaluate learning, provide direct feedback and build relationships. To avoid this, library instructors needs to directly measure their impact on student learning outcomes. They can proactively follow up with students, both those who are struggling and those doing well. Library instructors can have the greatest impact when instruction is interactive and always available online. Systems need to be upgraded so that it can integrate all these.

6.9. Conclusions

This module calls for accountability for instructional effectiveness are also a feature of the contemporary professional environment for college teachers, and another recently-developed model for facilitating instructional improvement among academic librarians focuses on summative assessment of teaching through the annual review, promotion, and tenure process. That is not all, library instructors need to integrate new systems in their instruction classes and tailor the courses toward the specific faculties and programs. In addition, through the module of assessment, I realised that I can create assessments that measure actual learning, as opposed to gauging students' attitudes regarding the quality of instruction. Only by thinking clearly about the research problem

and selecting the most appropriate assessment tool is it possible to generate meaningful and useful results.

7. WHERE DOES QUALITY FITS IN? TEACHING DIGITAL INFORMATION LITERACY SKILLS IN AN ACADEMIC LIBRARY: A REFLECTIVE PRACTICE PAPER

7.1. Introduction

This chapter presents a reflective piece on quality assurance in teaching digital information literacy skills in an academic library. Contemporary librarians are longing for quality digital information literacy skills instruction, but strategies to ensure that this happens are lacking in some institutions. The library has an important role to play in the 21st century, especially in the 4th and 5th Industrial Revolutions era, and librarians act as instructors of digital information literacy skills, to aid this important role. By virtue of being an academic librarian, serving the diverse population of users, the question on how one can ensure quality in instructional programmes becomes problematic. This paper tried to bring the face of where quality assurance meet with experiences in a journey of an academic librarian. The paradigm shift that has happened to our practice through the UNAM Postgraduate Diploma in High Education (PDHE), is analysed through the Transformative Learning Theory and perspective transformation as presented by Jack Mezirow (1978, 1981, 1994, 1997, 2000). Through practice, using Margret Archer's Social Realism theory's domains of structure, culture and agency, we then presents the case on how one see quality fitting into teaching and learning of digital information literacy skills in an academic library. The chapter concluded by recommending a solution to the challenges encountered while teaching digital information literacy skills as an academic librarian.

7.2. The landscape of DIL in light of COVID-19

COVID-19, caused by a virus from the coronavirus family, has spread to almost every country in the world since it was first detected in humans in late 2019. Closing universities and cancelling all face-to-face activities has become an unavoidable reality in many parts of the world as a result of COVID-19 (Gamage, Pradeep, Najdanovic-Visak & Gunawardhana, 2020). New ways of working digitally to minimize disruption to daily operations have created enormous anxiety and uncertainty among students, and meeting students' expectations has become significantly more difficult.

During the academic year 2020/2021, institutions moved from this emergency mode to exploring a large variety of hybrid or fully online arrangements as the national Covid-19 safety measures shifted depending on the status of the pandemic. The COVID-19 pandemic, which struck academic

libraries, compelled librarians and staff to redouble their efforts to reach out to users in the face of newly imposed safety measures such as building closures, quarantine periods, enforced social distancing, and so on (Decker, 2021). Not only that, but the present age of digital and electronic information environment has greatly change, evolved and challenged many academic libraries and academic librarians.

Against this backdrop, the role of quality assurance in ensuring that quality standards are maintained and supporting the university community in their work, while providing assurance to the public of the status of quality in higher education, has become paramount. This was not different from research libraries, their work was halted and there was an urge to support the researchers and scholars during that time. The quest for knowledge increased, and this means services that are seamlessly was to be used by both librarians and researcher to make sure that they provide information timely and efficiently. The sudden shift in the mode of operations caused by the pandemic raised questions around the effectiveness, relevance and flexibility of internal quality assurance arrangements.

Hamwaalwa (2015) noted with a concern that library user education and information literacy is currently not provided in Ministerial Libraries and suggested that there is a need for librarians to work together with Human Resource departments to include library user education programmes in the staff induction programmes. This is an area that remains unexplored to date, of which the part of quality assurance in ministerial specialised libraries remains a new concept that need to be explored as well.

This chapter aims to provide a reflexive insight into quality assurance practices of a research/ instruction librarians at National Earth Sciences and Energy Information Center (NESEIC) through a social realism theory. This will also present lesson learned from the experiences and what can be considered as a way forward in academic libraries delivering quality digital information skills instruction services. The account I am going to give in this chapter is from both an academic library within an academic set up in High Education and a research library in a governmental research institute set up.

7.3. National Earth Science and Energy Information Centre

National Earth Science and Energy Information Center (NESEIC) is a Ministerial reference Information Centre within the Ministry of Mines and Energy, that was established in 1994, to

collect, provide and promote adequate use of comprehensive, accurate and timely scientific, mining and energy information to its diverse clientele. It operates under the Department of Geological Survey of Namibia (GSN). The Geological Survey of Namibia (GSN) houses a wealth of geoscience data, information and other geoscience materials gathered throughout the history of the organisation. These data underpin the services and products provided by GSN. GSN offers a range of geoscientific services to the wider geoscience community in Namibia and beyond, government institutions to municipalities, universities and research organisations and the general public.

NESEIC has a long vision of connecting users to quality information and services by delivering resources on earth sciences and energy for the advancement of Namibian society. The Geological Survey is research based directorate within Ministry of Mines and Energy, thus the input of the research library throughout the life of a geoscientist working at the directorate become immeasurable.

7.4. My own career trajectory

My professional roles in two different libraries, academic and pure research library, have involved both contributing to and leading to the development of digital information literacy within major intuitional plans such as curriculum design and strategic goals. When I started my career in the academic library I had driven the conversations of including digital information literacy in the curriculum of the three programs offered in the institution. It was such a milestone, but that was just start, the questions comes in when the question of who should be accountable for teaching such content from the department of library and information services. Digital Information Literacy skills those not only lies into the hands of the library but also the wider academic fraternity need to be aware so that this collaboration can be achieved.

My career trajectory saw a shift in 2020, when I was enrolled into the Postgraduate Diploma for Teaching and Learning for Academics with UNAM. For much of the time since then, I have been involved in many committees within the institution such as curriculum development, quality assurance, remote teaching and learning committee. The second shift I have encountered was working with non-traditional students, the workforce.

Educational inequalities is integrally connected to deep rooted socio-economic inequalities which cannot be solved in isolation by higher education, nevertheless, innovative response on the part of higher education, nevertheless innovative response on the part of higher education systems and institutions can indeed open up life changing opportunities for individuals who would otherwise have been excluded (Slowey, 2012: 74).

I ground my own shift in Transformative learning theory and perspective transformation. Zeck Merizow concept of transformative learning provides a theoretical starting for considering how adults' personal evolution and development can happen. Adults' perspectives are made up of cognitive "frames of reference," which facilitate how they make sense of the world (Mezirow, 1978); in turn, these frames of reference are built from "habits of mind," or the initial reactions or judgments individuals make, almost instinctively (Mezirow, 1997). Adults' points of view, then, are the external expressions of their frames of reference and habits of mind (Mezirow, 1997). frames of reference and habits of mind may change with inputs from individuals' experiences in the world (Mezirow, 1978, 1994, 2000); in such instances, external-facing points of view also shift. The goal of experiencing transformation is to then enact changes in individuals' behaviors and, in turn, foster more authentic senses of selves. I didn't think of becoming an academic one day, I thought I was just doing my librarianship work by giving one shot library instruction courses to library users. When I went through a UNAM PDHE programme for academics, I went through transformation, I exited as an academic and I can identify as one. The goal of experiencing transformation is to then enact changes in individuals' behaviors and, in turn, foster more authentic senses of selves (Hess, 2019).

Quality defined

Harvey and Geen (1993) defined quality as an entity that can be viewed as exception, as perfection, as fitness for purpose, as value for money and as transformative. To expand to the four tenets/ interrelated ways of defining quality, Harvey and Green (1993) defined quality as exception, which has three dimensions, distinctiveness, excellence and quality as passing a set of required minimum standards. The quality that an academic library is distinctive and is of high class, but the question always remain if this libraries are at standards. Ministerial librarians in Namibia we have our own standards, but benchmarking with other academic libraries worldwide are far more better than us according to the services they offer. Can we still be regarded as offering a distinctive services

while our stakeholders are not having access to certain materials or collections or even internet to access the online content? Thus, quality take much form when it comes to definition.

Another facet of quality is perfection or consistency, this one focuses more on the process and this was where the Total Quality Management (TQM) framework coined. This requires everyone to be involved in the process and to ensure quality, from the cleaner to the vice chancellor if it is an institution. This is more common in business entities. When TQM applied to the library set up ,the ‘quality journey’, as it is commonly known, provided the opportunity to examine all elements of the Library, its structures, systems, services, processes and people. Through a lengthy process of planning, implementation, review and improvement the goals of the quality program may be achieved. Of greater significance, the organisational learning and development which was integral to the journey was more far-reaching and transformational than the library management could have envisaged at the outset. Academic or Research libraries are natural entities that suppose to serve everyone according to their mandate, aligned to the University/Research institute wider mandate and mission statement, thus subjecting them to zero defect may be questionable because of censoring information.

Quality is also known as fitness for purpose. The quality of a research library will be judged according to the research output that is being produced by the stakeholders.

Policies guiding the Namibian Libraries

The Namibian Libraries are being guided by the Namibia Library and Information Service Act 4 of 2000, a policy Framework for Libraries and Allied Information Agencies for Namibia of 1997 and different institutional policies where those libraries are located. In case of academic or specialize research libraries, there are guidelines and policies that are followed to by the practicing librarians. These guiding documents and policies only covers the general dealing of the libraries but does not cover the aspect of library as a learning institution where digital information literacy is covered. The Framework for Libraries (1997) states that libraries ensure quality of life and act as the agency which has a very great potential to enhance the quality of life for every member of the community.

One interesting fact that the Framework brings forth was the involvement of libraries of any type in providing information literacy to its clients’ development. Various forms of literacy

involvement were highlighted such as appropriate information material for illiterate or pre illiterate persons, provisions of instruction materials and reading materials to use in literacy classes as well as librarians to support in supporting literacy classes. Furthermore, information literacy is a key to competing and sharing with the world. To be competitive internationally, the economic requires workers to be able to express their information needs, retrieve required information, evaluate and process it for the purpose of decision making, problem solving research, development, production and delivery of services. My point is that, some of the frameworks that are developed in information literacy and other teaching tools developed for use in Western countries may be inappropriate in a non-Western Countries.

7.5. Quality Assurance in High Education

Internationalization in higher education has resulted in “a growing demand for accountability and transparency, which has in turn led to a need to develop a quality culture, while addressing the challenges of globalized higher education” (Smidt, 2015: 626). New ways of working digitally to minimize disruption to daily operations have created enormous anxiety and uncertainty among students, and meeting students' expectations has become significantly more difficult.

Determining criteria for assessing quality in higher education requires an understanding of different conceptions of quality that inform the preferences of stakeholders, while Quality Assurance (QA) is about good management practice. It is a systematic approach to doing the right things in the right way, and getting them right. It is about making certain there are systems in place so that the organization continues to deliver the right things every time to meet customers' requirements.

The literature contains many different definitions of quality assurance in higher education. Some authors “create a broad definition that focuses on a single central goal or outcome” (Schindler et al, 2015; referencing Bogue, 1998; Harvey & Green, 1993). Other definitions, on the other hand, “identify specific indicators that reflect desired inputs (e.g., responsive faculty and staff) and outputs.” From a European point of view, Quality Assurance is viewed as a generic term that embraces narrowly defined as the regulatory requirements and good practice under a common umbrella of diverse European local contexts. The basic principles guiding internal quality assurance strategies are:

Through the PDHE, I came to realise that quality assurance refers to managing a process(es), leading to doing the right things at the right time the very first time, therefore quality needs to be built into the product rather than sorting out the end product (separating the good and the bad as the end process), this becomes wasteful.

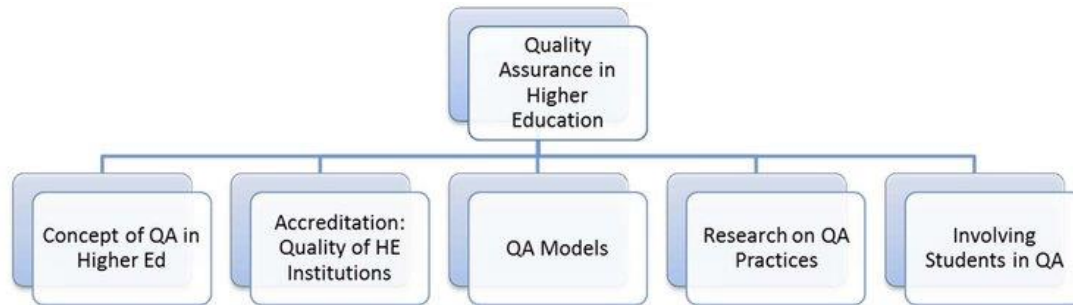


Figure 7.1. Quality assurance in higher education conceptual model (Ryan, 2015).

Universities play an important role in the development of scientific, cultural, and human resources. Professional higher education planners should evaluate university programmes to identify their strengths and weaknesses, accelerate scientific developments, and be accountable to educational needs at the national and global levels, as well as improve the quality of educational processes and programmes (Yarmohammadian, Mozaffary & Esfahani, 2011).

7.6. Importance of Quality Assurance in High Education

The importance of high-quality teaching in higher education cannot be overstated. Its pursuit has become more intense as competition among institutions has increased, as have opportunities to study globally via various modes. The role of QA Agency is to safeguard standards and improve the quality of higher education by offering advice, guidance and support to help universities, colleges and other institutions provide the best possible student experience of higher education.

Quality Assurance (QA) has an important role in monitoring an institution's own processes and performance of achievements, whereby it serves in a consistent application and continuous improvement of processes and reduces the scope for variability. Furthermore, the concepts of quality and standards are interconnected and it is difficult to discuss standards without discussing quality, and vice versa.

7.7. Quality Assurance in Libraries

For centuries, academic libraries have been regarded as important driving forces in the achievement of the purposes and goals of higher education institutions. The higher the performance of the library, the more likely it is that users will return. As a result, many authorities around the world have recognised the relationship between an institution's research performance and the quality of its library performance (Balog, Jerusic & Matosic, 2015).

7.7.1. Expected outcome of Quality Assurance

Ryan (2015) opined that quality assurance can motivate institutions to strive for excellence in higher education. However, in many countries, ensuring that the quality of educational programs meets both local and international standards has become a major challenge. Expected outcome of a Quality Assurance in an academic library set up would be a quality sought after collections, satisfied stakeholders, execution of mandate and achievement of objectives as well as a competitive advantage in the 4th Industrial Era.

7.8. Technology integration in Learning and Teaching Activities

Integration of information technology is of an important essence for modern educational systems as it acts as an effective tool for delivery of education to its users. Libraries are changing from circulation basis to information delivery through effective library instructions to the faculties and departments within the institutions of high learning. The usage of information technology (IT), systems and applications have gone through tremendous growth in the last decade, and the academic libraries were not an exception. Educational institutions are also in the process of adapting information systems for education purposes. Every field of education is utilizing information systems one way or another, of which the library instructors deals mostly with instructing the students on digital information literacy and other relevant courses (Abdulkareem Al-Alwani, 2014). Today's information environment is constantly evolving as new technologies are developed and adopted by greater numbers of individuals. Adding to the complexity of this environment is the exponential growth in the volume of digital information being produced (Sparks, Katz & Beile, 2016).

7.8.1. Technology Integration Strategy for Quality deliverance OF DIL

In the past, the use of technology in education often did not result in real progress because it was isolated from learning and regarded as engineering wonders (Hugo and Fakude, 2016:65). As

educators, we use different digital and hardware tools to facilitate the process of teaching and learning in and the outside of the classroom, this helps in enhancing, extending or enrich student learning. The integration approach manifests in systematic instructional design. It can be described as the process of developing plan for instruction through the application of theoretical principle of effective and efficient teaching, including learning theories (Hugo and Fakude, 2016:65).

The choice of media and ICT technology, can have a direct impact, not only on teaching and learning process but also on the ultimate outcome. Context should always be considered in selecting the technology one is going to use in the classroom, than focusing more on the technology applications themselves. Ultimately, technologies selection forms part of instructional design it relates to other elements of planning such as learning outcomes, subject content and instructional methods as well as strategies.

In coming up with a technology integration strategy, one has to consider planning. The planning cycle is a flexible and reflective process that can used to plan instruction from a whole unit to a single lesson (Hutchison, 2014). The purpose of Technology Integration is to successfully integrate technology within the classroom. There are various planning models such as SECTIONS model, TPACK model, SAMR model and Blooms Digital Taxonomy model. This strategy will employ the TPACK model.

7.8.2. Technological Pedagogical Content Knowledge Planning Model (TPACK Model)

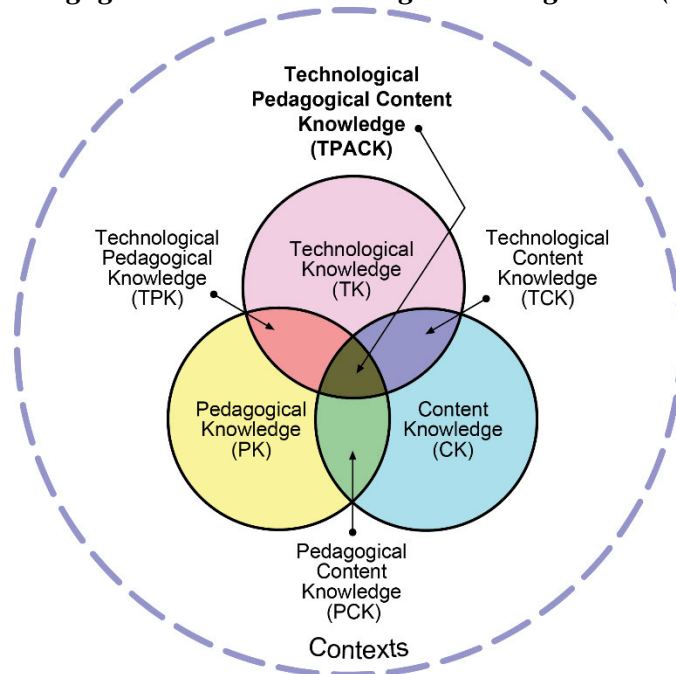


Figure 7.2. TPACK Model (Mishra & Koehler, 2006).

TPACK stands for Technological Pedagogical Content Knowledge. It is a theory that was developed to explain the set of knowledge that teachers need to teach their students a subject, teach effectively, and use technology. TPACK framework outlines how content (what is being taught) and pedagogy (how the teacher imparts that content) must form the foundation for any effective technology integration strategy (Mishra & Koehler, 2006). This order is important because the technology being implemented must communicate the content and support the pedagogy in order to enhance students' learning experience. TPACK also serve as a measurement of instructor knowledge, potentially impacting both training and professional development offerings for educators at all levels of experience. Finally, the TPACK framework is useful for the ways in which it explicates the types of knowledge most needed in order to make technology integration successful.

The use of learning technology, is difficult, time consuming and expensive, and should therefore focus on the aspect of critical learning for each course or programme. New technology changes both the curriculum and the way content is learned. Technology is an essential component of learning today, and with digital applications, tools and resources, students can create content, interact with experts, collaborate with peers and participate in simulation activities. Personalized experiences put students at the center of learning and empowers students to take control of their own learning through flexibility and choice. With this transformation to digital learning, it is important for stakeholders share the importance of moving towards digital learning with constituents, as well as address some of the concerns that occur during the transformation. Lack of Digital information literacy skills necessitate some of the challenge students (see Chapter 4) and lectures are facing , thus this fueled me to step up in changing the status quo for the recognition of this skills in the curriculum.

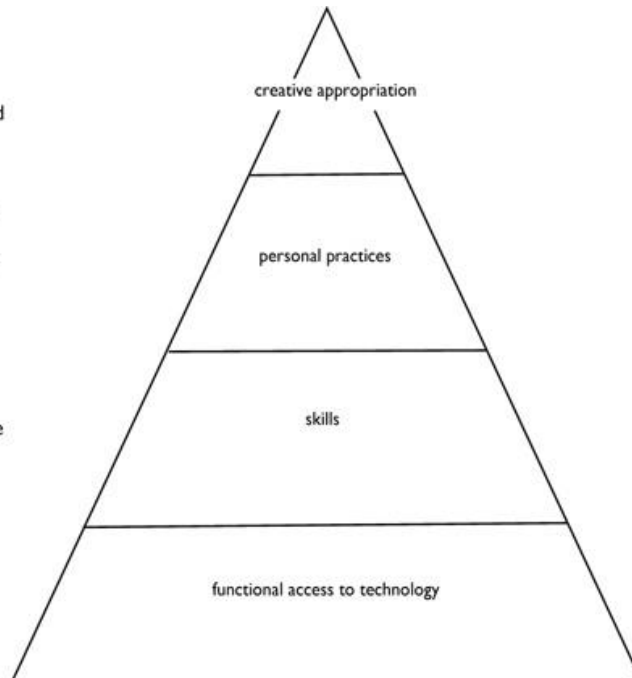
Learner development

Learners make use of the skills and practices they have developed to create their own learning environments.

Learners make informed choices about how to use technologies, e.g. alone and with others, and in response to individual and situational needs.

Learners develop generic, technical, information, communication, learning and organisational skills. They increase in confidence and can use their skills in a variety of learning contexts.

Learners gain access to the technologies, resources and services that they need. They overcome issues of ownership, mobility, accessibility and time.



Institutional support

Learners make use of the skills and practices they have developed to create their own learning environments.

Learners make informed choices about how to use technologies, e.g. alone and with others, and in response to individual and situational needs.

Learners develop generic, technical, information, communication, learning and organisational skills. They increase in confidence and can use their skills in a variety of learning contexts.

Preparing students to use an identifiable set of core technologies. Providing access to a range of technologies from multiple locations. Promoting the use of personal technology. Reconfiguring learning spaces for enhanced connectivity.

Figure 7.3. Beetham and Sharpe's (2011) model of students' digital literacies.

One way in which Sharpe and Beetham's model (see Figure 7.3.) might be used is to explain and illustrate what effective learning with technology looks like. Another way is to look at how learners develop through the levels of the model. A third use of the model might be to examine educational and institutional practices that support learner development towards effective learning (Sharpe & Benfield, 2015). This model will also be useful to me because it can be applied to lecturers' digital literacy practices. Therefore, understanding why and how I use technology tools is a necessary step towards promoting my effective use in teaching and learning and how I can still ensure and enhance quality. The discussion of digital tools and how they are being incorporated into educational practices has tended to focus on students' needs and development. Yet as Lea and Jones (2011) noted, it is the institution that validates particular aspects of digital literacy practices and it is lecturers who design and deliver the curriculum thus shaping how technologies are embedded into students' learning experiences.

7.9. Chapter summary

There is need to constantly improve the university system forever in terms of student training and service provision, in order to improve graduate quality with a constant decrease in costs (efficiency & effectiveness). There is great need to always link what we do with in teaching, learning and

research activities with extension/community services/engagement so that we directly contribute to the 17 Sustainable Development Goals. This is because the purpose of HE is to solve political, cultural and socio-economic challenges. Embedding QA in operations should be the core of academic libraries. Quality assurance should be solidly linked to issues of regulation, translation (rather than mechanical 'implementation') and transformation, instead of being only focused on quality assurance as a single policy instrument. The role of the institution is an important contextual factor in influencing how students develop the digital literacies and other technology-assisted practices to be effective in a digital age. Students have clearly articulated that they expect institutions to provide robust, reliable and accessible technology to enable them to use technologies wisely (Sharpe & Benfield, 2015).

8. CONCLUSION AND RECOMENDATIONS

8.1. Reimagining my scholarship and practice

Through reflectivity of one's own experiences, help with creating a more dynamic, empowered, liberatory educational experience of teaching digital information literacy skills as an academic librarian. Recognition of lifelong learning skills especially digital information literacy skills is equally important and should be included in the curriculum as a core course rather than a one-shot program to enhance the exit outcome skills of graduates. Finally, equipping academic librarians responsible for digital information literacy should be considered as a priority area due to the rapid change in the information landscape. Library instruction teaching, just like all other courses in an institution require relevant skills and expertise, so that one can effectively deliver it to the intended audience. The identify gap was lack of pedagogical knowledge from my side as an academic librarian. This gap was filled when I went through the PDHE programme. As librarian responsible with all the dealings of the library, one of my obligation is to instruct digital information literacy skills for the upskilling and reskilling of the workforce working as researcher within the Ministry.

Roger Brown once said, the most important misconception is that higher education is about satisfying students wishes as customers rather than about changing them as people (MacCaffery, 2010). As a practitioner, I realized that, far from being automate learning or self-directed learning, it is clear that where effective e-learning takes place, it does so with the guidance and presence of a successful and thoughtful practitioner. That is the role of the lecture in e-learning is just as important to student learning as it is in the classroom or lecture hall.

I have learned that, as an instructor, I should not only know the content that I am delivering to students, but I should also know the people I am dealing with so that I can deliver the correct pedagogical knowledge to them. Taking into consideration the contextual realities will help me during this ever changing world of disruptive technologies if I want to understand the students better and deliver DIL better. In addition, students profiling will help with knowing the students and their learning needs collectively and as and individuals.

8.2 Adopting student centered approach to teach DIL

During the era of 4th industrial era, pandemics, technology disruptions etc, educators are compelled to confront the biases that have shaped teaching practices in the fraternity of Higher

Education and to create new ways of knowing, different strategies for the sharing of knowledge. Teaching DIL or research methodologies to students using a student centered approach, helps students become independent researchers. Although there is no harm there is no much harm in teaching using teacher centered approach, mixing the two approaches will yield fruitful results. Whilst using a teacher centered approach, hinders the process of learning because students tend to memorise the concepts rather than knowing the research concepts, yielding bad results and low quality research outputs. Student centered approach is the ideal approach I am proposing to be used in learning and teaching DIL.

8.3. Critiquing my own practice

Criticality allowed my scholarship to be more relevant to the whole academic society by situating me with the broader conversation happening across disciplines and faculties. It is my criticality that afforded me the grace to represent the library issues in management of the Institution and gradually to the curriculum review committee. This enhanced my voice in various committee and that's how I became a trustable voice in representing our DIL affairs. The criticality through the PDHE expanded my boundaries of what I know and think, and helped with opening up new possibilities and avenues of research I might not have considered otherwise as discussed in various chapters of the portfolio. It allowed me to critically examine what I do, how I do it and why I do it. It also afforded me the opportunity to know students better

8.4. Integrating relevant technology to deliver effective Learning and Teaching of DIL

The impact of globalisation create continuous changes which include disruptive technologies, work organisation and skills formation , requiring high level of generic skills at all levels of education which requires. Through reflectivity of one's own experiences, it helped with creating a more dynamic, empowered, liberatory educational experience of teaching digital information literacy skills as an academic librarian. Thus, recognition of lifelong learning skills especially through alignment of digital information literacy skills curriculum is equally important and should be included revisited using appropriate pedagogical guidelines and HE assessment framework in the curriculum as a core course rather than relying on ad hoc a one-shot program to enhance ensure graduates exit outcomes are in accordance (relevant) with the 4th and 5th Industrial Revolution. The exit outcome skills of graduates. This portfolio proposed relevant interventions and

pedagogical guidelines. Finally, earmarked as essential for equipping academic librarians with appropriate competencies and knowledge base and be proactive and cognisant of techno-socio-cultural impacts facing the democratisation of knowledge and access to digital information widely.

There is great need to always link what we do with in teaching, learning and research activities with extension/community services/engagement so that we directly contribute to the 17 Sustainable Development Goals. This is because the purpose of HE is to solve political, cultural and socio-economic challenges. Embedding QA in operations should be the core of academic libraries. Quality assurance should be solidly linked to issues of regulation, translation (rather than mechanical ‘implementation’) and transformation, instead of being only focused on quality assurance as a single policy instrument.

DIL should be interactive (including quizzes, response prompts and applied learning activities) and it is always available online. Static instruction and time-constrained group instruction limit the ability of library instructors to pose questions, evaluate learning, provide direct feedback and build relationships. To avoid this, library instructors needs to directly measure their impact on student learning outcomes. They can proactively follow up with students, both those who are struggling and those doing well. Library instructors can have the greatest impact when instruction is interactive and always available online. Systems need to be upgraded so that it can integrate all these.

REFERENCES

- Abdulkareem Al-Alwani (2014). Information technology integration in higher education: A novel approach for impact assessment. *International Journal of Emerging Technologies in Learning* (IJET) 9(6):32-36 Retrieved from <http://dx.doi.org/10.3991/ijet.v9i6.4036>
- Amato, G. , Straccia, U. (1999). User profile modelling and applications to digital libraries. Conference: Research and Advanced Technology for Digital Libraries, Third European Conference, ECDL'99, Paris, France, September 22-24, 1999, Proceedings, Retrieved from https://www.researchgate.net/publication/221176246_User_Profile_Modeling_and_Applications_to_Digital_Libraries
- Amukugo, E.M. (1993) *Education and Politics in Namibia: Past Trends and Future Prospects*. Gamsberg, Windhoek.
- Anyira, I.E. (2011). The anatomy of library users in the 21st century. *Library Philosophy and Practice* (e-journal). 535. Retrieved from <https://digitalcommons.unl.edu/libphilprac/535>
- Association of College and Research Libraries. (2000). *Information Literacy Competency Standards for Higher Education*. Retrieved from <http://www.ala.org/acrl/standards/informationliteracycompetency>
- Barnett, R. (2004). The Purposes of higher education and the changing face of Academia. *London Review of Education*. 2 (1), 61-73. DOI: 10.1080/1474846042000177483.
- Baxter, J. A. (2012). Who am I and what keeps me going? Profiling the distance learning student in higher education. *The International Review of Research in Open and Distributed Learning*, 13(4), 107-129. Retrieved from <https://doi.org/10.19173/irrodl.v13i4.1283>
- Bertram, C. (2012). Bernstein's theory of the pedagogic device as a frame to study history curriculum reform in South Africa. *Yesterday and Today*. 7. Retrieved from http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2223-03862012000100002
- Bewick, L. & Corral, S. (2010). Developing librarians as teachers: A study of their pedagogical knowledge. *Journal of Librarianship and Information Science*, 42 (2). 97 - 110. Retrieved from [http://d-scholarship.pitt.edu/25162/1/Bewick %26 Corral %282010%29 e-print.pdf](http://d-scholarship.pitt.edu/25162/1/Bewick%20Corral%202010%29_e-print.pdf)
- Bignoli, C. & Stara, L. (2021). Responding to rapid change in libraries: A user experience approach. *American Libraries*, 52(5), 50. Retrieved from <https://www-proquest-com.ezproxy.uct.ac.za/trade-journals/responding-rapid-change-libraries-user-experience/docview/2522189005/se-2?accountid=14500>

- Bloxham, S. & Boyd, P. (2008). *Developing effective assessment in higher education: A practical guide*. New York, Two Penn Plaza: Open University Press.
- Boughey, C. (2011). Institutional difference: A neglected consideration in the scholarship of teaching and learning?, *International Journal for the Scholarship of Teaching and Learning*, 5(2). Retrieved from <https://doi.org/10.20429/ijstl.2011.050206>
- Bulgurcuoglu, A. N. (2016). Relationship between Critical Thinking Levels and Attitudes towards Reading Habits among Pre-Service Physical Education Teachers. *Educational Research and Reviews*, 11(8), 708–712.
- Case, J.M. (2015) A social realist perspective on student learning in higher education: the morphogenesis of agency. *Higher Education Research & Development*, 34:5, 841-852, DOI: 10.1080/07294360.2015.1011095
- Castañeda-Peña, H., Barbosa-Chacón, J. W., Marciales, G., & Barreto, I. (2015). Profiling information literacy in higher education: Traces of a local longitudinal study. *Universitas Psychologica*, 14(2), 445-458. Retrieved from <http://dx.doi.org.10.11144/Javeriana.upsy14-2.pilh>
- Chanetsa, B., & Ngulube, P. (2016). The changing roles, responsibilities and skills of subject and learning support librarians in the Southern African Customs Union region. *Journal of Librarianship and Information Science*, 48(2), 151–176. Retrieve from <https://doi.org/10.1177/0961000614551451>
- Ching, S.H. & New, B. (2021). Information Literacy and Transcultural Learning: How Chinese Calligraphy and Historical Korean Poetry Were Turned into a Library Co-Curricular Initiative. *The International Information & Library Review* 53(2), 142-156.
- Corrall, S.& Jolly, L. (2019). Innovations in Learning and Teaching in Academic Libraries: Alignment, Collaboration, and the Social Turn. *New Review of Academic Librarianship*, 25:2-4, 113-128, DOI: 10.1080/13614533.2019.1697099
- Dan, L., Morgan, C., O'Reilly & Pally, S. (2004). *The student assessment: new directions in traditional and online assessment*. Routledge.
- de Wit, H., & Jones, E. (2018). Inclusive Internationalization: Improving Access and Equity. *International Higher Education*, 94, 16-18. Retrieve from <https://doi.org/10.6017/ihe.2018.0.10561>
- Doherty, J. J. & Ketchner, K. (2005). Empowering the Intentional Learner: A Critical Theory for Information Literacy Instruction. *Library Philosophy and Practice* (e-journal). 70. Retrieved from <https://digitalcommons.unl.edu/libphilprac/70>

- Erixon Arreman, I., Erixon, P.-O., & Rehn, K.-G. (2016). Postcolonial teacher education reform in Namibia: Travelling of policies and ideas. *European Educational Research Journal*, 15(2), 236–259. <https://doi.org/10.1177/1474904115612794>
- Falloon, G. (2020). From digital literacy to digital competence: the teacher digital competency (TDC) framework. *Education Tech Research Dev* 68, 2449–2472. Retrieved from <https://doi.org/10.1007/s11423-020-09767-4>
- Fomunyam, K.G. & Teferra, D. (2017). Curriculum responsiveness within the context of decolonisation in South African higher education. *Perspectives in Education*, 35(2): 196-207. DOI: <http://dx.doi.org/10.18820/2519593X/pie.v35i2.15>
- Framework for Information Literacy for Higher Education*, American Library Association, February 9, 2015. <http://www.ala.org/acrl/standards/ilframework> (Accessed August 16, 2021)
- from [http://lstiiep.iiepunesco.org/cgi-bin/wwwi32.exe/\[in=epidoc1.in\]/?t2000=024772/\(100\)](http://lstiiep.iiepunesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in]/?t2000=024772/(100)).
- Fry, H., Ketteridge, S., & Marshall, S. (2009). *A handbook for teaching and learning in Higher Education: Enhancing academic practice*, 3rd ed. United Kingdom. Routledge. Retrieved
- Giloi, S. & Quinn, L. (2019) Assessment of Sustainable Design: The significance of absence in *The Design Journal*, 22 (6): 833-851. DOI: 10.1080/14606925.2019.1651601p 833-851
- Harnegie, M.P. (2021). Responding to rapid change in libraries: A user experience approach, *Journal of Hospital Librarianship*, DOI: 10.1080/15323269.2021.1942694
- Hernon, P. & Dugan, R.E. (2004). *Outcomes assessment in higher education: Views and perspectives*. United States, London: Libraries United.
- Inefuku, H.W. (2017). Globalization, open access, and the democratization of knowledge. *Educase Review: Why IT matter to Education*. Retrieved from <https://er.educause.edu/articles/2017/7/globalization-open-access-and-the-democratization-of-knowledge>
- Kishun, R. (2011). Student mobility trends in Africa: A baseline analysis of selected African countries. In: Bhandari R., Brumethal, P. (eds) *International students and global mobility in Higher Education*. International and Development Education. Palgrave Macmillan, New York. https://doi.org/10.1057/9780230117143_8.
- Laurillard, D. (2002). *Rethinking university teaching, a framework for the effective use of learning technologies*. 2nd ed. Routledge.
- Li, Y., Chen, Y. & Wang, Q. (2021) Evolution and diffusion of information literacy topics. *Scientometrics* 126, 4195–4224. <https://doi.org/10.1007/s11192-021-03925-y>

- Macfadyen, A, English, C., Kelleher, M., Coates, M., Cameron, C. & Gibson, V. (2019). ‘Am I doing it right?’ Conceptualising the practice of supervising master’s dissertation students, *Higher Education Research & Development*, 38:5, 985-1000, DOI: 10.1080/07294360.2019.1597024
- Matengu, K., Likando, G., & Kangumu, B. (2014). Governance and Coordination of the Higher Education System in Namibia: Challenges and Prospects. FIRE: Forum for International Research in Education, 1(2). Retrieved from <http://preserve.lehigh.edu/fire/vol1/iss2/4>
- Meyer, S. & Van Niekerk, S. (2017) *Nurse Educator in practice*. Cape Town: Juta.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teachers’ knowledge. *Teachers College Record*, 108 (6), 1017–1054
- Moll, I. (2004). Curriculum responsiveness: The anatomy of a concept. In H. Griesel (Ed.), *Curriculum responsiveness: Case studies in higher education*. Pretoria: SUAVCA.
- Ng'ambi, D. and Bozalek, V. (2016). Chapter 12: Learning with Technologies in resource-constrained environments. In the *Wiley Handbook of Learning Technology*. N. Rushby and D. W. Surry (Eds.) Wiley Blackwell. 200-220
- Otolo, P.U. (2021). Globalization, technological advancement, and the traditional library system: Implications for information utilization. In Waller S., Waller, N., Mpofu, V. & Kurebwa, M. *Education at the Intersection of Globalization and Technology*. IntechOpen, <https://www.intechopen.com/chapters/74001>
- Pajayon-Berse, P.P. (2019). *Democratization of Higher Education and responsible internationalization: Bridging the gap toward an accessible and inclusive education*. Blueboard, Ateneo de Manila University, Department of Political Science. Retrieved from <https://www.ateneo.edu/ls/sooss/political-science/news/research/democratization-higher-education-and-responsible>
- Pangrazio, L., & Sefton-Green, J. (2021). Digital Rights, Digital Citizenship and Digital Literacy: What’s the Difference?. *Journal of New Approaches in Educational Research*, 10(1), 15-27. doi:<http://dx.doi.org/10.7821/naer.2021.1.616>
- Pertersen, S. (2021). President Hage Geingob appoints Fourth Industrial Revolution task force. The Namibian Newspaper. (05 July 2021). <https://www.namibian.com.na/103185/read/JUST-IN--President-Hage-Geingob-appoints-Fourth-Industrial-Revolution-task-force>

- Pieters, J., Voogt, J. & Roblin, N.P., (Eds). (2019). Collaborative curriculum design for sustainable innovation and teacher learning. *Springer*. <https://doi.org/10.1007/978-3-030-20062-6>
- Pieterse, E., Greenberg, R., & Santo, Z. (2018). A Multicultural Approach to Digital Information Literacy Skills Evaluation in an Israeli College. *Communications in Information Literacy*, 12 (2), 107-127. Retrieved from <https://doi.org/10.15760/comminfolit.2018.12.2.4>
- Price, R., Becker, K., Clark, L. & Collins, S. (2011). Embedding Information Literacy in a First-Year Business Undergraduate Course. *Studies in Higher Education*, 36(6), 705-718. Retrieved from <https://www.learntechlib.org/p/65936/>.
- Price, R., Becker, K., Clark, L. & Collins, S. (2011). Embedding Information Literacy in a First-Year Business Undergraduate Course. *Studies in Higher Education*, 36(6), 705-718. Retrieved from <https://www.learntechlib.org/p/65936/>.
- Raju, J. (2012). Shaping LIS education for blended professionals in a pluralistic information environment: Global reflections. *Journal of education for Library and Information Science*. 62 (4). DOI:10.3188/jelis-62-4-2020-0024.
- Riddle J.S. & Hartman, K.A. (2000). But are they learning anything?”, *College & Undergraduate Libraries*, 7:2, 59-69, DOI: 10.1300/J106v07n02_06
- Rowley, J. (2003) *Profiling and understanding student information behaviour: Methodologies and meaning*, ALT-J, 11:1, 28-40, DOI: 10.1080/0968776030110104
- Schroeder, R., & Cahoy, E. (2010). Valuing Information Literacy: Affective Learning and the ACRL Standards. *Portal: Libraries And The Academy*, 10(2), 127-146. Retrieved from https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1042&context=ulib_fac
- Schroeder, R., & Cahoy, E. (2010). Valuing Information Literacy: Affective Learning and the ACRL Standards. *Portal: Libraries And The Academy*, 10(2), 127-146. https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1042&context=ulib_fac
- Shalyefu, R. K. (2018). The interplay between structure, culture and agency on student learning and academic development activities; a trajectory of the University of Namibia. *The Namibia CPD Journal for Educators*, 69 - 87. Retrieved from <https://doi.org/10.32642/ncpdje.vi.1300>
- Sharpe, R. & Benfield, G. (2012). Institutional strategies for supporting learners in a digital age. *Enhancing Learning in the Social Sciences*, 4(2):1-17. DOI:10.11120/elss.2012.04020004

- Sharpe, R. & Benfield, G. (2015). Institutional strategies for supporting learners in a digital age. *Enhancing Learning in the Social Sciences*, 4:2, 1-17, DOI: 10.11120/elss.2012.04020004
- Shihomeka, S.P. (2019). *Citizen Engagement: Politics and digital media in Namibia*. PhD thesis. Erasmus University Rotterdam. Retrieved from <http://hdl.handle.net/1765/121963>
- Singson, M. & Lhungdim, T. (2012) Curriculum based approach to information literacy education. Retrieved from [http://eprints.rclis.org/17512/6/Information literacy to the new breed of consumer - final copy-1.pdf](http://eprints.rclis.org/17512/6/Information%20literacy%20to%20the%20new%20breed%20of%20consumer%20-%20final%20copy-1.pdf)
- Solmaz, Y.D. (2017). Relationship between Lifelong Learning Levels and Information Literacy Skills in Teacher Candidates. *Universal Journal of Educational Research*. 5(6): 939-946. DOI: 10.13189/ujer.2017.050605
- Sparks, P.J., Katz, R.I. & Beile, P.M. (2016). Assessing Digital Information Literacy in Higher Education: A Review of existing frameworks and assessments with Recommendations for Next-Generation Assessment. *ETS Research Report Series*. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1124778.pdf>
- Suskies, L. A. (2009). *Assessing student learning: a common sense guide*, 2nd ed. United States of America, San Fransisco: John Wiley and & Sons, Inc.
- Thompson, G.B. & Lathey, J.W. (2013). An integrated model of information literacy, based upon domain learning. *Information Research*, 18(3) Retrieved from <http://InformationR.net/ir/18-3/colis/paperC02.html>
- Thompson, G.B. & Lathey, J.W. (2013). An integrated model of information literacy, based upon domain learning. *Information Research*, 18(3) Retrieved from <http://InformationR.net/ir/18-3/colis/paperC02.html>
- Thomson, C. (2015). Jennifer M. case: Researching student learning in higher education: A social realist approach: London: Routledge, 2013. 155 pp. ISBN: 978-0-415-66235-2. *Higher Education*, 69(1), 165-167. Retrieved from <http://dx.doi.org.ezproxy.uct.ac.za/10.1007/s10734-014-9756-7>
- User studies in university libraries*. (1987). International Reader in the Management of Library, Information and Archive Service. Retrieved October 20, 2021, from <http://www.nzdl.org/cgi-bin/library?e=d-00000-00---off-0cdl--00-0----0-10-0---0---0direct-10---4-----0-0l--11-en-50---20-about---00-0-1-00-0--4---0-0-11-10-OutfZz-8-00&cl=CL1.67&d=HASH01470b3dd4c4bf3ad5024f22.7.5.1>=1>
- Wakeman, C. (2011). Information literacy in the context of contemporary teaching methods in higher education. In *Information Literacy: Infiltrating the Agenda, Challenging Minds* (pp. 71–84). Retrieved from <https://doi.org/10.1016/B978-1-84334-610-4.50004-5>

- Wema, E. (2018). Investigating reading culture among students in higher learning institutions in Tanzania. *University of Dar es Salaam Library Journal*, 13(1): 4-19. Retrieved from <https://www.ajol.info/index.php/udslj/article/view/184586/173943>
- Zinn, S., Stilwell, C. & Hoskins, R. (2016). Information Literacy Education in the South African Classroom: Reflections from Teachers' Journals in the Western Cape Province. *Libri*, 66(1), 31-44. Retrieved from <https://doi.org/10.1515/libri-2015-0102>

APPENDICES

Appendix 1: Orientation programme for new intake



2 DAY ORIENTATION PROGRAMME FOR NEW INTAKE E/N MARCH 2020 WINDHOEK CAMPUS

3 MC: Ms Ong'ondo, Ms Petrus

DATE: March 2020

VENUE: Block 4 Hall

TIME	THURSDAY	TIME	FRIDAY
08H30-09H00	Welcome Address and Introducing staff Prof S. lipinge/ Mrs Shali	08h30-09h00	What is Nursing? Mrs Salim
09h00-09h15	Students to Introduce themselves	09h00-09h30	Experiences of a male nurse Mr Shimanda
09h15-09h45	Interpersonal Skills Mrs Lucas	09h30-10h00	Students policies and contacts on at WHTC Mr Robert
10h00-11h00	ADDRESS: Nursing Council and Walkthrough first year modules Mrs Petrus and Nelumbu	10h00-10h20	Introducing the Resource Centre and library resource Mr Hipangwa
11h00-11h15	Break	10h20-10h35	Break
11h15-12h15	ADDRESS: Drug law and Safety enforcement officer Namibian Police	10h35-11h00	My responsibility as a student nurse - in practice Mr Chinyama
	-	11h00-11h30	Study skills Mrs Shilula
12h15-12h45	Rules of progression Mrs Shali	11h30-12h00	SRC Address: including social activities SRC President
12h45- 13h15	WHTC students as WHTC ambassadors Ms Ong'ondo	12h00-12h20	Finance Ms Sandra
13h15-13h30	Tour around the campus Mr Shilongo & Mr Hipangwa	12h20-12h50	Nursing etiquettes Mr Kopano

	END OF DAY	12h50-13h10	Question and Answer from the segment Mrs Lucas; Ms Sandra & Mr Kopano, Ms Petrus
		13h10-13h30	Evaluation of orientation days and Issuing of timetable Ms Denhere
			END OF ORIENTATION

Appendix 2: Student Profiling Instrument

WELWITCHIA HEALTH TRAINING CENTER



DEPARTMENT OF LIBRARY AND INFORMATION SERVICES

USER SERVICES SECTION

PROFILING INFORMATION LITERACY AT WELWITCHIA HEALTH TRAINING CENTRE

Information literacy is directly associated with both academic performances and standardized ways of accessing and assessing information in academic institutions. With these sentiments, this questionnaire aims at finding information in order to assist in developing customised information literacy skills training at WHTC library and to explore opportunities to make your academic journey at WHTC smooth and successful. You are kindly encouraged to fill in all the questions as required. All information will be handled anonymously. Thanks in advance!

SECTION A: DEMOGRAPHIC INFORMATION

Name:	
Student Number:	
Course of Study:	
Age	

Sex	
Marital Status	
Citizenship	
Disability	

SECTION B: READING BACKGROUND

2.1 How often do you visit the physical library/ library website?

- Every day
- Twice a week
- Once in a week
- I don't visit the library

2.2 Fiction or non-fiction books

- Fiction
- Non Fiction
- None of the above

2.3 Why do you visit the physical library?

- To meet with friends
- To do group assignments
- To search for information
- To relax my mind

2.4 In one sentence, describe your reading culture.

.....

SECTION C: ACCESS TO ICT FOR LEARNING PURPOSES

3.1 Do you own:

- A computer or laptop
- A cell phone without internet access
- A cell phone with internet access
- A tablet pc (e.g. iPad)
- Nothing

3.2 In case you own a cell phone or a tablet pc: what do you use it for?

- Playing games

- Surfing the Internet
- Receiving and making phone calls
- Writing SMS
- Taking pictures
- Creating films

3.3 Which search engines do you know?

- Google
- Yahoo
- Bing
- Scirus
- AltaVista
- Lycos
- Other: _____
- I don't know any search engines

3.5 Which search engine do you use most?

- Search engine: _____
- I do not use any search engines

3.6 You have to write a research paper on the topic of academic achievement. You want to narrow that topic, and you have developed the following research question: How does exercise affect academic achievement in college students? What are two different search strings you might type into a search engine (such as Google) to find information on your topic?

3.7 How would you rate your abilities in the following areas?

IL Areas	Excellent	Good	Average	Bad	Poor
Searching for literature in libraries					
Internet searching					
Citing literature					
Formulation of search strategies					
Identification of appropriate sources for information					
Evaluation of sources					

Knowledge about information law and ethics (e.g. Copyright, Privacy)					
--	--	--	--	--	--

SECTION D: PREFERED TRAINING STYLE

4.1 Covid 19 is at our doorsteps, there are various information exploding everywhere including lies, how would you know that the information you are consuming is true.

- Checking the authority of the information
- Askind a friend
- Watching news on NBC TV
- Listening to the radio
- Verify with newsfeed from social media platforms (Tweeter, WhatsApp or Facebook etc)

4.1 One of your younger brother came back from school and they were given a homework about “My Family tree”. The teacher asked them to draw a family tree and explain in details their drawings. How will you help you younger brother?

- I will search from the internet, and give him to copy and paste into his exercise book
- I will do the homework for him
- I will leave him to do his homework alone
- I will explain the meaning of the homework in details and give him resources to do his homework independently

4.2 The are various activities going on I the campus library, students were invited to attend, which of the following activity will you attend.

- Mendeley Training in the library foyer
- Book launch in the library auditorium
- “Exam Preps” talk by the Vice Chancellor
- Presentation on the information literacy

4.3 There is a new library discovery tool called PRIMO to replace the library OPAC discovery tool. Choose the best way to get to know PRIMO.

- Through step to step video tutorial
- Through a seminar training by the librarian
- Through practicing in the computer lab
- Through fellow students who have used it before

Appendix 3: Peer Observation of Learning and Teaching



Faculty of Education and Human Sciences

Peer Observation of Learning and Teaching (PoLT)

Peer Observation of Learning and Teaching is a collaborative process. Both the person being observed and the observer have important roles before, during and after the observation. Collaborating at each stage of the process can help put both participants at ease so that each benefits from the experience.

The purpose of this practice is to improve our teaching and learning by collaborating with our peers as our mirrors for teaching development. It could also serve as evidence for reappointment for part-timers, promotion, academic awards, and renewal of contract or conclusion of a probation period.

IF YOU ARE BEING OBSERVED

Before

- Be prepared to discuss with the observer:
 - Goals for the class
 - What you plan to do in class that day
 - What you want the observer to pay attention to
- Tell the observer
 - Where you'd like the observer to sit
 - If you'd like the observer to take part in class
 - Where the class meets, and when

During

- Introduce the observer to the class.
- Explain the purpose of the observation.
- Explain the observer's role to the students.
- Soon after class, write down your reflections on the class so that you will be prepared to discuss it with the observer. y

After

- With the observer, reconstruct what happened in class
- Think about goals for the class and the specific class session that was observed. Be prepared to describe:
 - What you felt went well
 - What you would change
 - What was typical or atypical about the class
 - Ask for specific descriptions and constructive suggestions.

IF YOU ARE THE OBSERVER

Before

- Clarify the purpose of the observation:
 - For reappointment, promotion, renewal of contract or probation purposes?
 - For individual teaching development?
- Meeting with your colleague or teaching assistant/tutor to discuss:
 - What will happen in class that day
 - What to pay attention to
- Describe what you'll be doing during the observation.
- Schedule a meeting to discuss the observation.

During

- Record observations:
 - What is the instructor doing / saying?
 - What are students doing/ saying?
- Record your impressions and questions; for example:
 - "Is there another way to present that concept?"
 - "Seems clear, but students look confused. Why?"
- Participate in the class only if invited to do so.

After

- With the tutor, reconstruct what happened in class lecture or tutor
- Ask your colleague or tutor to describe:
 - What he/she felt went well
 - What he/she would change
 - What was typical or atypical about the class
- Listen to your colleague or tutor
- Describe rather than evaluate what you saw
- Finally, offer constructive suggestions.

HOW CAN WE HELP?

- CPDTLI can offer academic support if you would need help when you are preparing for Peer Observation of Learning and Teaching. We can share tools that you can adapt to your context. See the example below adapted from Faculty of Education: Teaching Practice grid/grading rubrics tools.

IF YOU ARE THE **OBSERVER**

Before

- Clarify the purpose of the observation:
 - For reappointment, promotion, renewal of contract or probation purposes?
 - For individual teaching development?
- Meeting with your colleague or teaching assistant/tutor to discuss:
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LECTURER OBSERVATION FORM

Surname: Hipangwa Initials: MVS Staff No.: _____

Study

Course: Postgraduate Year 2021 Module E - Resource training: NBS
Library Instruction

Date: 18/09 Time: 18H00 Assessor's Name & Signature: Jakobina Mwilijale
SM/TE

GRADING:

FINAL GRADE %	A (80-100)	B (70-79)	C (60-69)	D (50-59)	E (Below 50)
<u>89%</u>					

RATING:

A <input checked="" type="checkbox"/>	Demonstrated excellent competence of the criterion
B <input type="checkbox"/>	Demonstrated advanced competence of the criterion
C <input type="checkbox"/>	Demonstrated above average competence of the criterion
D <input type="checkbox"/>	Demonstrated average/satisfactory competence of the criterion
E <input type="checkbox"/>	Demonstrated insufficient competence of the criterion

For each criterion, tick the box (A-E) that best describes the lecturer's competence in that criterion. Evaluate the lecturers' overall competence in each section (1-9). Making use of the ticks as a guideline, use the rating scale for each section to guide you in allocating a grade for that section. Add all the grades to determine the final grade.

EVALUATION CRITERIA	RATING SCALE					GRADE	COMMENTS
	A	B	C	D	E		
1. LESSON PLAN & PREPARATION:	12-15	10-11	9	8	0-7	<u>15</u> / <u>13</u>	
a) Appropriate objectives developed i.t.o ¹ of topic	<input checked="" type="checkbox"/>						
b) Attainable competencies indicated	<input checked="" type="checkbox"/>						
c) Content described in detail		<input checked="" type="checkbox"/>					
d) Appropriate teaching strategies indicated	<input checked="" type="checkbox"/>						
e) Appropriate learning strategies indicated		<input checked="" type="checkbox"/>					
f) Resources identified and available for use	<input checked="" type="checkbox"/>						Resources shared and clearly equipped.
g) Appropriate assessment strategies indicated i.t.o attainment of competencies		<input checked="" type="checkbox"/>					formative assessment used to test the students knowledge
2. LESSON INTRODUCTION (5)	5	4	3	2	0-1	<u>5</u> / <u>4</u>	
a) Gained immediate interest		<input checked="" type="checkbox"/>					Student gained interest
b) Linked up with students' prior knowledge	<input checked="" type="checkbox"/>						Students thought it was research class but the lecturer directed student to the right path.
c) Clarified objectives for lesson	<input checked="" type="checkbox"/>						

d) Creative introduction	✓						
3. LESSON PRESENTATION (20)	19-20	17-18	14-16	11-13	0-10	20	17
a) Presented content in a logical sequence	✓						
b) Made insightful use of subject knowledge	✓						
c) Used a variety of relevant learning and assessment tasks to develop students thinking skills		✓					
d) Communicated with all students		✓					
e) Patient with, interested in, listening to students	✓						
f) Demonstrated good questioning skills		✓					
g) Included open/higher level questions		✓					
h) Praised and corrected answers to questions/learning efforts		✓					
i) Sensitive to gender, ability, special needs and individual differences of students	✓						
j) Students engaged in active learning		✓					
k) Student-centered activities used	✓						
l) Positive methods of reinforcement		✓					
m) Summary of main ideas and conclusion given		✓					
4. SUBJECT KNOWLEDGE (15)	12-15	10-11	9	8	0-7	15	14
a) Demonstrated an understanding of subject knowledge	✓						
b) Related knowledge to life situations and other subjects		✓					
c) Developed the thinking and values of students	✓						
d) Used own subject knowledge	✓						
5. COMMUNICATION SKILLS (12)	10-12	8-9	7	6	0-5	12	10
a) English usage was proficient	✓						
b) Spoke clearly with a varied tone	✓						
c) Appropriate non-verbal communications skills used effectively		✓					
d) Communicated with all sectors of the class		✓					
6. TEACHING AND LEARNING MEDIA (8)	7-8	6	5	4	0-3	8	8
a) Varied use of creative and appropriate media	✓						
b) Effective and skillful use of teaching/ learning media	✓						
7. LECTURE ROOM MANAGEMENT (10)	8-10	7	6	5	0-4	10	9
a) Implemented orderly procedures for students entrance, leaving, participation	✓						
b) Maintained discipline assertively	✓						

c) Organized physical conditions well		✓					
d) Created a democratic atmosphere		✓					
e) Managed time effectively							
8. ASSESSMENT (10)	8-10	7	6	5	0-4	10/9	
a) Assessed students' understanding continuously	✓						
b) Used constructive probing of students' knowledge and understanding	✓						
c) Appropriate feedback provided	✓						
d) Provided exercises for practice/homework given		✓					
9. GENERAL IMPRESSION OF LECTURER (5)	5	4	3	2	0-1	5/5	
a) Demonstrated confidence and enthusiasm for teaching	✓						
b) Appeared friendly and caring towards students	✓						
c) Demonstrated emotional maturity and responsibility	✓						
d) Appropriately dressed and groomed	✓						

1. i.r.t. = in regard to



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Similarity	11%
Analysis address	ljosua.unam@analysis.arkund.com

Plagiarism report can be accessed from <https://secure.arkund.com/view/111262878-532225-403970>