

Maintaining student engagement: the digital shift during the coronavirus pandemic a case of the library at the University of Pretoria

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Abstract

The South African Higher Education Institution (HEI) sector had to move to ‘emergency’ online learning during the covid-19 pandemic, and they embraced a humanistic approach underpinned by the need to complete the academic year in 2020 and support all students. Because this emergency online learning accelerated the digital shift, evidence of pre-existing disparities and inequalities have been magnified, such as the digital divide, infrastructure, connectivity, access to data, digital literacies, vastly different learning environments, software and hardware tools, and others.

The Department of Library Services (DLS) is aligned to the University of Pretoria’s shift to online learning and to reimaging its service offerings and innovation readiness. It deliberately adopted a responsive engagement strategy for students, staff, senior management and service providers. Therefore, the DLS now offers a mix of services and programmes, with more reliance on virtual services to support and sustain the academic agenda.

This paper provides real-life case study experiences of student engagement during the covid-19 pandemic, with reference to the relevant student engagement with literature. It also reflects on how the DLS previously applied attributes of service innovation, such as ‘employing’ a client-service robot at an HEI library in Africa, this being in keeping with the UP’s innovation culture.

Keywords: student engagement, digital shift, covid-19, South African academic libraries, academic libraries, library service innovation, virtual services, study spaces, collections

1. Introduction

Academic libraries has embraced student engagement as an evolving concept since the 1990s. Upon inspecting its adoption (Kuh & Gonyea, 2003; Murray, 2015; Schlak, 2018; Whitley &

Burger, 2019; Appleton, 2020), it became clear there is no consensus on what its definition should be. It broadly refers to meaningful student involvement in the learning process, extracurricular activities and community engagement. Its adoption in academic libraries raises several practical considerations, because as libraries and their responsibilities shift, library staff must refocus their engagement with students accordingly.

This paper examines student engagement at the Department of Library Services (DLS), University of Pretoria (UP), South Africa, during the global outbreak of covid-19 in 2020, and what shaped engagement with students thereafter. In previous years, the DLS focused on its engagement with students where scheduling, frequency and role-players were predetermined.

As digital libraries' components had been evolving over the past two decades, the transitioning to 'emergency' online learning in Higher Education Institutions (HEIs) in South Africa raised the need for libraries to pivot to fully online support and programming.

The transition to emergency remote learning occurred shortly after a national announcement made due to the health emergency of covid-19. HEIs were determined to save the academic year and to be responsive to their students' and staff's needs. The DLS had to examine its digital readiness to ensure it was suitable and to ensure off-campus access for students using different pathways to access information resources. The readiness of staff to embrace changing environments, adjust business operations and work in cross-functional teams also needed attention. Engagement with stakeholders, especially with students, became a priority, as this would convey their needs and views. The DLS's ability to respond to and handle change was stretched to the limit. As the digital shift happened very fast, it became clear that short-term plans were essential and flexibility to adjust quickly was essential. As shortcomings were exposed, opportunities emerged.

The lockdown levels and regulations, Department of Higher Education and Training directives and institutional guidelines at all times informed the DLS suite of offerings. This article offers information about which new skills and knowledge DLS staff members needed. Staff wellness became important in the transition to working from home as the varied environments and home responsibilities were a challenge for some. Therefore, directing staff to support services offered and in-house discussions on self-care, personal and mental health was important. As the mode and scheduling of engagements changed, the responsiveness of DLS staff would determine the quality of the experience for students and academic staff.

The pandemic transformed the higher education environment, and it remains to be seen which new ways of operation will remain. For academic libraries, the pandemic also became

a driver of change and reconsidering collections, spaces, services and operations. The DLS fashioned a response to the academic and research programmes with minimal disruption.

1.1 Student engagement in higher education institutions

The term ‘student engagement’ has been widely embraced in HEIs (Schlak, 2018); its definition appears to be varied as some view ‘student engagement’ as referring to certain student activities and behaviours (Schlak, 2018; Appleton, 2020) and some view it as referring to how lecturers elicit perceptions, knowledge and beliefs from students. It can also refer to a deeper level of involvement where students voice their experiences and preferences (Appleton, 2020).

The priority of the units and departments in HEIs was student success (Madiba, 2014; Mandew, 2014). Where little or no appreciation of each department’s contribution exists, structured collaboration and cooperation become a missed opportunity (Mandew, 2014) of holistic and integrated student development (Madiba, 2014).

As competition becomes a driver of excellence in HEIs, more emphasis is placed on improving the university’s reputation, prestige rankings and employability of graduates (Bell, 2008). HEIs are increasingly emphasising graduate attributes such as qualities, skills sets and understanding essential for all students before graduation. It is no longer the Student Affairs units’ responsibility to contribute to student life. Having students who are engaged, have life-long skills and are ready to contribute to society is emphasised (Madiba, 2014).

Student engagement within HEIs enhances active learning, leading to institutional performance and educational quality (Schlak, 2018). The research conducted since the 1980s on student engagement points to its positive contribution to student retention, completion and employability (Zepke & Leach, 2010). Student services and student development are important and should be complementary.

Technology adoption has increased in every sphere, including the education sector. There are various learning modalities such as face-to-face, blended-learning, emergency online and fully online learning, and this has an impact on how the engagement would occur. In South Africa, as in many developing countries, HEIs have adopted digital technologies for learning, teaching and assessment. Using learning management systems allows online early warning systems that enable institutions to assist students who need additional help. UP adopted learning management systems two decades ago, and has witnessed greater, although uneven, adoption of blended learning across disciplines.

Zepke and Leach (2010) warn of intrinsic or extrinsic limitations, which may impinge on willingness of students to engage. HEIs should mitigate such factors to enable more participation.

1.2 Student engagement in academic libraries

Academic libraries prioritise engagement with the student community, which allows for wide-ranging academic support (Schlak, 2018) at all levels of study. The literature agrees that libraries should pursue student engagement, because then they contribute to the scholarly (Kuh & Gonyea, 2003) and cultural life of its parent institution.

Academic support falls within the ambit of scholarly contribution, where libraries' offerings are evident in activities such as students seeking face-to-face or online librarian assistance. Students may also need assistance with finding sources and making judgements about the quality of the information they find. Libraries offer individualised research assistance to postgraduate students and contribute to their research skills development by providing appropriate programmes that support postgraduate studies. Using digital libraries ensures greater self-directed learning (Kuh & Gonyea, 2003) where librarians develop appropriate learning materials. Furthermore, academic libraries in research-intensive institutions prioritise supporting research skills, digital literacies and competencies (Bell, 2008) of postgraduate students.

Students who regularly use libraries would generally be hard-working with good work ethics and engage in academically challenging work. It seems that for certain students, especially members of historically underrepresented groups, libraries are a positive learning environment (Kuh & Gonyea, 2003). Day students would also benefit from libraries, as they provide convenience.

There are several approaches to categorising student engagement activities in academic libraries. The following categories by Appleton (2020) were used to frame the discussion in this paper. The first way of engaging students is through teaching and learning activities provided or supported by the library. Secondly, through receiving feedback and allowing the student voice to shape the planning of services and offerings within the library. Finally, the partnerships librarians have with students and other stakeholders.

Over the past decade, the DLS focused on connecting with the university community. As the library supports the university's academic activities (Obaseki, Maidabino & Makama, 2012), it is also important to assist students to complete their academic tasks in the minimum time. UP has a programme called the Finish Line is Yours (FLY) for undergraduate students

and FLYHigher to ensure postgraduate students complete in minimum time. Therefore, academic support is essential and seeking the students' voice and opinions informs the programmes that students need. As the DLS works towards an inclusive culture for the diverse community, the students' voice anchor their engagements.

The DLS also offers information and digital literacy sessions for different levels of study. The adoption of embedded librarianship two decades ago resulted in strong collaboration with academic departments. This relationship ensured more involvement in curriculum planning and instructional offerings at the point of need. The information specialists now have more opportunity for advocacy, training and engagement with students.

Embracing new and emerging services and offerings over the years laid the foundation for greater success with interventions during the pandemic. The traditional offerings included a mix of print, online, face-to-face and virtual (Skype) services. The traditional offering, which included a strong e-resource component, assisted in adapting to virtual services, particularly during the initial lockdown phase when the DLS was completely closed.

The following services became paramount during the lockdown: virtual references, book collection services (initiated by the needs of the Faculty of Humanities), Click & Collect for print resources, book drop boxes at campus entrance gate, scanning of materials with copyright limitations, social media and website messaging, Ask & Chat services, amnesty on fines and automatic renewals. Alongside these, services to capacitate staff members included laptop delivery, mobile technical support and data provision, which represent the institution's unique value proposition and are in line with international trends. These interim services also presented the opportunity to reinforce our services in future.

A literature review indicated similarities with the innovative ways libraries adopted to continue serving users, some of which might become the norm in future. There is no doubt that the lockdown has strengthened many libraries' online service provision, as libraries invested more in digital resources and services (Dadhe & Dubey, 2020). The Ithaka report on US libraries reminds us that before the pandemic, libraries were investing significantly more on electronic resources. This trend is expected to persist while budget allocations for print resources will continue to decline (Frederick & Wolf-Eisenberg, 2020).

During the hard lockdown in South Africa, referred to as Level 5 lockdown, the DLS provided virtual services and only 3D printing of face shields was available from the physical library. Working closely with other professional service departments became important to facilitate seamless services to students. Consultation with various groupings of students such as Faculty Houses became important. Some of the needs expressed were received from

faculty members acting as proxy for the student voice, which led to more frequent discussions with publishers and aggregators to enable better access where copyright limitations were experienced. These conversations facilitated more collaboration among DLS role-players such as Marketing and Quality Assurance, Technical Services, Access and Lending, Digitization and the Management Team, which led to the breaking down of walls between them.

The DLS focused on hearing the students' opinions, suggestions and criticisms through surveys, interviews and focus groups conducted by the Marketing and Quality Assurance Unit. The university also conducted institutional surveys directed at students and staff across academic and professional service departments. During the last two years, the DLS has established a User Experience Unit to solicit student voice and preferences at shorter intervals and to involve students during the design phase of the programmes and services. Various role-players in the DLS, the director's office, management team, units and individuals scheduled engagements with students aimed at listening to the concerns and suggestions of students, and improving the student experience. Students employed in the DLS also provided valuable insights into the concerns and problems needing attention. Platforms such as social media and chat services amplified the student voice.

2. Covid-19 and the digital shift

During the difficult times of the covid-19 pandemic, academic libraries had to transform quickly, and change and reshape routines and services (Rafiq, Ali, Batool & Ullah, 2021; Dadhe & Dubey, 2020). The covid-19 lockdown forced the South African HEI sector to move quickly towards online learning quickly, which accelerated the digital shift.

Globally, university libraries used their trendsetter status in digital use to implement more emerging technologies to enable their users to access resources online, with little or no handicaps. Martzoukou (2020) argues that this crisis created radical shifts for HEIs, some of which would have taken years to materialise under normal circumstances due to logistical, operational or bureaucratic hurdles, or managerial or higher-level strategic resistance to new ways of operating.

When covid-19 disrupted academic programmes throughout the world, the DLS established a covid-19 response task team. This task team's mandate was to initiate a rapid and wholesome shift to remote work arrangements, ensuring access to online services. Greenhall (2020) explains 'digital shift' is an umbrella term for the move from analogue to digital platforms of many library services, operations, collections and audience interactions.

In many areas, academic libraries had already enabled blended services, discovery services, mobile applications, multimedia cloud computing applications and more (Hamad, Al-Fadel & Fakhouri, 2020).

According to Kowalczyk (2018) and Moropa, Soyizwapi, Nel and Van der Walt (2020), digital technologies in modern libraries have spread through every aspect of library operations, for example, it affected the way libraries handle knowledge and defined new kinds of communication and interaction with library materials. Following its objectives over the past decade, the DLS embraced technological functionalities that allow its users to access information resources and services using various electronic equipment, devices, systems and materials that produce, store, or disseminate information (Tiemo, 2019). As the university adjusted and transitioned to online learning and teaching, the DLS also had to adjust and support the continuity of the academic programme in the “new normal” remote only context.

2.1 Service changes

The rapid demand for online material access caused by mandatory closure of libraries to fight the spread of covid-19, prompted the DLS to assess, modify and expand existing scanning and digitisation offerings, and to facilitate copyright clearance and guidance. The DLS worked hard to ensure most of their resources were available and accessible during the lockdown. During this time, the government decided to repurpose allocations for bursary holders away from learning materials to acquisition of laptops, which may have resulted in a greater need in students for essential or prescribed readings.

As a top university library in Africa, with a large, ever-growing e-collection (journals and books), the library was able to provide the information needs of most staff and students during the pandemic. According to statistics, the DLS continued to support students and staff who increasingly downloaded and accessed e-books and e-journals. Investment in e-resources, which had been coming for the past two decades, appeared to have paid dividends. Obaseki et al. (2012) assert that, in uncertain financial times, academic libraries tend to move from big deals to core collections, cut back and reconsider contract durations.

The DLS was able to prioritise the digital curation of most of the university’s research outputs. Meanwhile, a task team was scanning selected book chapters from the study collection and other items only available in hard copy. The on-demand service items would henceforth appear on the popular software app, CLICKUP (Blackboard Learning Management System), to enable wide access by students. The request for this service has increased during the lockdown. This process of making reading and study material available

to students unlocked access to most reserved materials in the library, in accordance with the provisions of Dramatic Artistic Literary Rights Organisation responsible for ensuring copyright compliance in South Africa as regulated by the Copyright Act of South Africa, 1978, and its subsequent amendments. Copyright limitations have undeniably minimised the filing of requests.

Meanwhile, the DLS's goal was to increase virtual services, enabling librarians to continue support for teaching, learning and research, so that hands-on skills for searching and using digital tools, previously provided face to face, were not stalled. Enhancing skills of library staff was essential to make them comfortable to assist library users who adopted the use of these virtual platforms. The DLS offered effective remote enquiry and individual reference support, although scheduling of online appointments was a new feature. The use of Libguides has increased as more information and instructional material were added for easy access. Engaging with library staff via Ask a Librarian, Chat, and chatting to the chatbot, Libby, has also increased. Since the university launched its first chatbot, the library has strategically set up Libby to interact with users by directing and prompting them to select simple self-service options the library made available to students and staff.

As the pandemic continued to rage, the DLS advocated for better adoption of UP's policies on open access and open access publishing, policy on electronic theses and dissertations, guidelines for the UP Open Access Fund for Article Processing Charges (APCs) and the Research Data Management Policy. The DLS has been instrumental in drafting the Open Educational Resources (OERs) policy. OERs from other institutions worldwide became vital sources of supplementary academic resources, as they are freely available as credible educational material.

Like other academic libraries in developing countries, one of the DLS's major challenges was providing highly developed digital services to its staff and students, which required DLS staff with strong knowledge and skills to work in a fast-changing online environment. Consequently, to cope with the fast- and ever-changing information landscape, the DLS will undertake a survey to establish the extent of digital competencies of its staff, as it considers how its digital services may evolve moving forward.

The health protocols discouraged staff and user interactions, even when campuses allowed limited numbers to be present. Kiana and Mabeifam (2020) feel training should not be minimised as it has huge benefits for virtual services as the demand for online research support has increased. Walsh and Rana (2020) note that students and scholars did their best to adapt to the changing information service landscape and its practices, rather than putting

work on hold. Scholarly communication services offered by the DLS included supporting the research life cycle, research data management, and digital scholarship. The coronavirus pandemic altered the way the library engaged with students where academic development pivoted to online consultations, training offerings and webinars. As access to learning materials became more pressing, discussions with faculty members and publishers were scheduled at greater intervals. As some libraries had received goodwill from publishers at the onset of the pandemic, renegotiating the offering became essential to align them with essential readings for the library. Consultations with students and ascertaining their needs became even more important.

2.2 *Socio-economic inequalities*

While most South African HEIs' libraries' responses and online service provision may have been uneven, there was strong evidence that disparities and faultlines of inequalities in society have been magnified. This was evident in areas where the digital divide became pronounced, infrastructure disparities, uneven connectivity, access to data, digital literacies, learning and research environments, software and hardware tools, and others.

Across the world, governments implemented mitigation measures, such as online learning to manage and cope with the disruptions caused by the pandemic (Mhlanga & Moloi, 2020; IFLA, 2020). The fourth industrial revolution tools generally used by institutions during the covid-19 lockdown enabled some South African academic institutions to honour their pledge to complete the 2020 academic year, with most announcing the switch to online teaching and learning activities with effect from 31 March 2020.

Access to higher education is aligned to access to digital technology in the modern era; yet in many developing countries, the digital divide is largely seen as a gap in access to information and communication technologies (ICTs). In South Africa, although ICTs have improved tremendously over the years, there is still an overwhelming need to improve physical access to technology in rural and urban residential areas. This can bridge the gap between the underprivileged (mostly the black) and privileged (mostly affluent urban) communities.

Oyedemi (2012) argues South Africa has limited household internet and fixed broadband penetration, despite the country having set its goal to be an advanced information society in which information and ICT tools are key drivers of economic and societal development. The problem of low internet penetration is complex and multifaceted, and hinders educational, social, economic and political developments.

The digital shift and the limited access to campuses by university students had a direct relationship with the pattern of internet access and ICT use, specifically knowledge and information databases of libraries. While access to the internet is available to students on university campuses, limited access to the physical buildings and ICT infrastructure means students face the necessity to have their own gadgets, such as laptops and cellphones to access the online library or other internet-connected information sources (Okite-Amugboro, Makgahlela & Bopape, 2014).

UP students come from diverse socio-economical and geographical backgrounds. In essence, the digital divide reflects the divides between various categories of students, depending on where they come from, between the rich and poor, and thus outside campus there are internet 'have' and 'have not' students (Oyedemi, 2012). Geographical location also had adverse effects on students where internet coverage is unequal and does not reach some areas. This meant provision of laptops and data would not assist students; hence, printed resources had to be sent to affected students periodically, and telephonic tutorial support provided. Family circumstances affected affordability of electricity. Obaseki et al. (2012) assert that unavailable and unreliable electricity has a negative impact on virtual library services.

Nyahodza and Higgs (2017) identify access to ICTs and information-related skills as key requirements and challenges in bridging the digital divide in South Africa. Many students depend on internet access from the hosting university and access the online library databases mostly onsite, as slow internet speed is acknowledged as a major problem off campus. UP intervened where students had connectivity problems by delivering print resources and offering telephonic tutoring.

Van Deursen and van Dijk (2019) argue that students used various gadgets, laptops, desktops, tablets, or smartphones to access resources or lectures. When covid-19 forced the South African government to close or restrict access to public and private facilities, 78% of the students funded by the National Student Financial Aid Scheme due to a household income of less than ZAR350,000 (US\$18,600) per annum, were disadvantaged. Most of these students did not have access to computers and relied on on-campus access. Online learning and access to information were problematic due to lack of internet connectivity in rural areas, lack of electricity (even in urban areas), lack of conducive learning and study environments and non-affordability of data and gadgets.

3. Lessons learnt, staff re-orientation and readiness at the DLS

During April 2017, a panel of national and international members evaluated the DLS. One of their most important recommendations was for the DLS to identify its key functions and relevant future innovations to improve its services and functions. This recommendation has already been implemented by identifying nine high-level focus areas, which enhanced the library's readiness.

3.1 New skills and knowledge

Adaptability and willingness to learn were essential dispositions for changing environments. As DLS was not fully prepared for the digital shift, being adaptable and open to learn about and gain more insights into copyright, changing business models for books, and varied access to ebooks became essential. Sometimes, it was difficult for students and staff to decipher misinformation and disinformation due to the many published articles having been retracted; therefore, it became necessary to identify articles with less academic integrity.

3.2 Mode of engagement shift

It became imperative to engage with the university community as the library sought clarification about experiences of staff and students to meet their needs.

3.3 Provisioning for DLS staff

Following the FeesMustFall protests of 2017, the DLS adopted a policy of replacing desktop computers with laptops. During the pandemic, many of the library's staff already had laptops, although additional laptops were needed to allow more staff to work from home. The library had to establish guidelines for providing data bundles and new software to support the academic programme.

3.4 Staff wellness

The lockdown and changes in the educational landscape exacerbated general and mental health issues and institutions had to focus on staff wellness. In some cases, students and staff experienced extended periods of separation from family, friends and colleagues. During the hard lockdown level, being outside the home for walking or exercising was also prohibited, which led to heightened feelings of worry and stress.

3.5 *Work processes and matrix teams*

Reengineering work processes is part of normal work in most organisations. There was a need to increase cross-functional teams in the library, as a limited number of staff were allowed on campuses. This gave rise to changing roles, reassigning work, and re-engineering workflows and processes. HEIs will likely witness accelerated adoption of blended learning after covid-19. Libraries have to find innovative ways of embracing the benefits of technology to support the academic programme, including development of new skills for virtual environments.

Because remote working became the norm rather than the exception, the DLS had to invest in remote working infrastructure and digital tools, had to devise systematic and structured approaches for the new era, which required different working scenarios and digital culture, and had to establish new supporting mechanisms for staff and students to help them develop new skills, boost their interactions, keep social connections and create an overall sense of belonging and wellbeing (Martzoukou, 2020).

3.6 *Alternative information resources*

The growing adoption of hybrid and online learning models for delivering lectures had an impact on access to a larger variety of information. This led libraries to recommend a higher percentage of open educational resources, open textbooks, and other open content, and had implications for institutions to revisit intellectual property policies to facilitate access within the institution. Due to the reigning financial uncertainty and cutbacks, exploring a greater mix of open resources is recommended.

3.7 *Responsive library website service and improvements*

As students access the internet from various devices, library websites had to be responsive and adaptive to mobile devices. Gbaje and Kotso (2014) confirm the need for library websites to facilitate easy access and navigation. The DLS embarked on a project to renew the website in response to the user community's needs.

3.8 *Strategic digital services to be enhanced and extended*

The library pursued the following strategies and initiatives supporting the evolving needs of students by developing online and blended programmes to enable access to appropriate library resources:

- Collate a collection of online reference materials, books and journals that meet the needs of students and faculty.
- Provide students with a range and broad access to material through interlibrary loans, other agreements, and document delivery.
- Information specialists meet student and faculty instruction and reference service needs.
- Provide a set of tutorials and subject/course guides addressing the students' needs in online and blended programmes.
- Information specialists to be embedded and collaborate with faculty involved in online and blended-curriculum programmes to identify needs
- Lead efforts on open educational resources
- Create, preserve and increase access to culturally relevant information resources to elevate historically underrepresented collections
- Digitisation on demand service linked to the Blackboard Learning Management System (CLICKUP).
- Develop plans demonstrating how librarians will meet synchronous and asynchronous instruction needs in online and blended programmes in their areas of responsibility
- Introduce an evaluation system which checks the performance of library staff, notably during this period of digital shift

The DLS was proactive in addressing services to improve its student engagement initiatives, as stated by Ifijeh and Yusuf (2020), who suggest “apart from the provision of document delivery, reference and information services through dynamic and user-friendly library websites, many university libraries have embraced the concept of an ‘embedded librarian’ in the operation and management of online education.” The covid-19 pandemic forced the DLS to shift to a fully hybrid library service mode in these client-facing areas: academic support service, scholarly communication, digital scholarship, student learning centres, research commons, makerspace and special collections.

4. Conclusion

The purpose of this paper was to reflect and focus on the factors that informed and affected student engagement due to the shift of teaching and learning online. The RLUK's current strategy provides an appropriate framework for key areas impacted by the digital shift to reshape scholarships, collections, operations, connections and audience to shift, grow and

change. The fundamental challenges emerging were ill preparedness for the transition, the need for South Africa to transition from the digital divide to digital inclusion and not enough attention paid to staff wellness.

The article highlighted some aspects relating to UP's situation during the pandemic that affected academic services. The challenges identified that impeded effective student engagements could contribute to new studies in future. UP, as a parent institution for libraries, must support the measures implemented because of covid-19 to ensure such services continue in the long term. There is a need to invest in staff, e-resources, and overall restructuring of library's spaces. This will position academic libraries to respond more effectively when struck by unplanned circumstances as such as covid-19.

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Table 1

Objectives	Implementation Strategies
Online Digital Collections	
Develop a collection of online reference materials, books and journals that meets the needs of students and faculty in online and blended curriculum programmes	<p>Review collection development policies and plans to ensure they meet the requirements of students in online and blended curriculum programmes</p> <ul style="list-style-type: none"> ● Work together with faculty and create a mechanism to add e- resources required for teaching and learning ● Increase budget allocation for online journals, databases, ebooks, streaming media ● Information Specialists to be imbedded and collaborate with faculty involved in online and blended curriculum programmes to identify needs ● Select resources needed to support online learners as part of the ongoing Library Collection Development strategy ● Lead efforts on open educational resources ● Create, preserve and increase access to culturally relevant information resources to elevate historically underrepresented collections. ● Blended library offerings ● Digitisation on demand service ● Enhance discovery of online collections
Access to Print and other Media-based Resources	
Provide students in online and blended curriculum programmes with a range and broad access to material through interlibrary loan, document delivery, and interlibrary agreements	<ul style="list-style-type: none"> ● Review policies and/or procedures for loaning books to off-campus students ● Review policies and/or procedures for delivering articles held in the library's print collection to students off campus ● Review policies and/or procedures for loaning media to students off campus ● Continue to develop and evaluate policies and procedures granting UP students access to resources at other libraries ● Inform students in online programmes about how they can access online resources at other libraries ● Seeking solutions to limit the quarantine period of print and other physical resources ● Decrease budget allocation for print resources
Librarians provide synchronous and asynchronous reference and information services	
Librarians meet student and faculty instruction and reference service needs	<ul style="list-style-type: none"> ● Provide librarians with access to the same synchronous and asynchronous tools used by teaching faculties ● Keep abreast of current uses of library technologies and upcoming innovations ● Train librarians in using the synchronous digital technologies supported by the library ● Develop plans demonstrating how librarians will meet synchronous and asynchronous instruction needs of online and blended programs in their areas of responsibility ● Awareness of hybrid/blended learning models ● Online and scheduled reference services ● There should also be an evaluating system which checks the performance of library staff, notably during this period of digital shift
Online tutorials and libguides are developed and used to impart digital literacy and library specific knowledge	
The library will provide a set of tutorials and subject/course guides addressing the needs of students in the online and blended programs	<ul style="list-style-type: none"> ● Develop and maintain plans for supporting existing and forthcoming online courses and programs ● Provide participating librarians with the necessary technologies and trainings to achieve curricular goals