

Creating Engaging Information Literacy Courses for Self-guided Experiential Learning: the case of the University of Pretoria

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Make today matter

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UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
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Make today matter

Definition of Academic libraries

A library that resides in a higher learning institution that supports the curriculum and research of the students and staff of the same institution.

Background to UP Department of Library Services

- UP is ranked in the top 5 institutions in SA (URAP index)
- One of the oldest institutions in SA and provides a refreshing mix of academic traditions and progressive vision.
- 9 Faculty libraries across different locations

- **Vision:** *To be the leading research library in Africa, internationally recognised for advancing inquiry, excellence in teaching and learning, and innovation for the great good.*
- **Mission:** *The Department of Library Services (DLS) will enable discovery, innovation, collaboration, and connect people with quality resources, expertise, and diverse spaces. We will support student success, enable research that matters, bring people together to experiment, explore and create new knowledge in accessible and enabling environment.*

UPDLS Values

...We foster an atmosphere that encourages diversity and lifelong learning in a welcoming and conducive environment We encourage international partnerships to achieve shared goals...



Introduction

- Libraries are crucial in the academic success of students
- Libraries play an important role in educating researchers in handling their research inquiries and objectives.
- Information literacy is a building block for research literacy
- Information literacy = active information users and problem solvers.
- Self-guided learning is increasingly becoming important
- Experiential learning = learning and applying skills and knowledge gained

Definition of Information Literacy

Information literacy is the means of identifying, accessing, organising, evaluating, interpreting, analysing, synthesising, and applying information.

It is one's proficiency in the use of information resources

Library Ethics

Ethical information literacy must be embedded in the use of the integrated library systems through library policies that:

- Shape the way resources are provided and services are offered.
- Shape the way the resources are handled.
- Shape the way the resources and services are legally used.
- Mold behavior of users towards information.
- Advance the policies and values of the library
- Enable users to make informed choices

Definition of Experiential learning

“Experiential learning is referred to as the process of extracting meaning from direct experience, i.e., “learning from experience” (Hajshirmohammadi, 2017:166).

Simply put, it is learning by doing

Experiential Learning for Information Science

- Final year Information Science students
- Actively 'work in the library' on various projects during June/July recess
- Work in divisions such as: digitisation, collection building, bibliometrics, information needs analysis and retrieval
- Preparation and group presentation on work done during the experiential learning experience
- Sign off from library required

Embedded librarianship defined

An embedded librarian is integrated in, actively participates and collaborates with users in a physical, and/or Virtual Learning Environment (VLE) to provide custom information products and services that suit the needs of the users.

It entails: active participation, integration, collaboration, innovation

Embedded librarianship at UPDLS

- Proactive and continuous engagement with departments and users
- Active participation in course review and re-development
- Consistent use of terminology
- Use of templates for uniformity
- Information literacy modules
- User location and user needs (physical, distance, online)
- Multimedia content creation and maintenance
- Ask/Chat to a librarian
- Virtual and face-to-face assistance

User eXperience

- Started as the DLS focus areas in 2020 and adopted as a unit in 2021
- Specific challenges that users experience with the online library
- Study aimed at measuring user satisfaction levels with the online library
- Currently responding and adapting training in line with the feedback

Knowledge of Learning Trends

The following are important for the library in its active role to be an agent of information literacy. First hand knowledge and application of trends are important for the the expectations of users and their needs.

- Digital technologies
- Neuroscience
- Information Ethics

Digital Trends in Technology at UP

- EndNote
- Instructional system design software
- Electronic resource management system
- Copyright management
- Classroom management software
- Integrated search software



Neuroscience

Is the study of thinking patterns in the human brain and it is important to acknowledge the fact that the human brain is not rule-based.

UP published study on neuroscience:

***De Boer, A.L., Bothma, T. and du Toit, P., 2011.
Enhancing information literacy through the
application of whole brain strategies.***

Adaptive Learning Approach

- Personalise learning through customisation

The adaptive learning approach looks at the:

- Content
- Sequence
- Guidance/instruction
- Keep learning style and level of difficulty in consideration
(geographical, previous education/learning experiences from 'home' institution)

Blended learning defined

- Blended learning is an “umbrella term” to describe different learning models
- Used interchangeably with hybrid learning
- Combination instruction method
- Complement for face-to-face classes where web-based materials are provided

Definition of Virtual Learning Environments

- “A virtual learning environment (VLE) is an online platform used for educational purposes. It encapsulates all the online environments that act as supplements to the course, whether they are online courses, reading resources and informational sites with stand-alone skill assessments, or other forms of virtual learning” (Open LMS, 2022:1).
- It is a web based platform for: structuring, managing, communicating, and delivering educational content and activities to a defined group of students for a specific module to enhance their learning experience.

Factors in Instructional Design

- Use and train experts
- Collaboration between library staff and academics who are subject matter specialists
- Standardization of course material
- Use of the standardized branding templates of UP
- Built-in best practices
- Storyboarding

Instructional Design practices at UP

- User-centered learning experience
- Micro learning
- Gamification
- Use of evaluation models

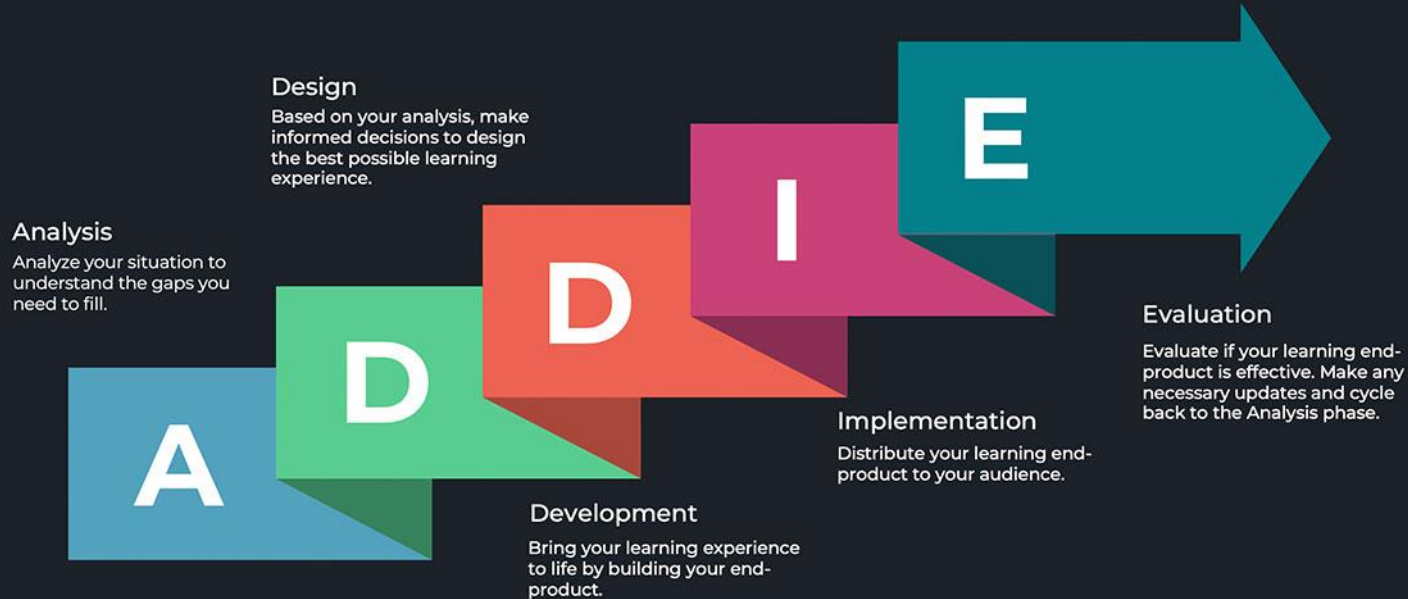
In essence: The what, why, how, when, for who

UPDLS Adoption of Hybrid Learning

- Information Specialists provide support for Teaching and Learning at UP
- Design subject-specific guides, general help guides, open access resources guides, and ClickUP (Blackboard) self-paced courses and modules
- Use of ADDIE model for instructional design & content creation

ADDIE model of Instructional Design

ADDIE Model of Instructional Design



Self-Paced Library Learning Initiatives

- Libguides with multimedia content and activities (Alumni, Open Resources, subject-specific)
- Library ClickUP modules for undergraduates (AIM, Learning Centre, Engineering)
- Libby
- Slack
- Department of Information Science 3rd year Experiential Learning Project
- Mamelodi learners pre-admission university tutoring and mentoring programme
- New staff/ Research associates/ Postdoctoral fellows

The UP library's initiatives

Two different type of assessments is used to test the application of information skills: summative and formative assessment.

Summative assessment focus on evaluating a student at the end of an unit and benchmark the result, i.e. Medical 1st year students' library intervention

Step 1	Provide activities & assess, use ClickUP & Video
Step 2	Teach by questioning, Use clicker app
Step 3	Students revise and apply
Step 4	Students have more than one opportunity to “master” the module and receive the full credits for the specific module

Performing a literature search

Student Surname, Initials:		Student #:	
Criterion of assessment	Mark out of 10	Weight	Mark × weight
Search yields <i>(Did the search find relevant papers, without missing important references or returning an excessive number of irrelevant references?)</i>		1	
Searching strategy <i>(Were sensible keywords chosen, taking into account alternative spellings, and Boolean search logic?)</i>		1	
Choice of papers <i>(Of those papers which were chosen [on the basis of their abstracts] as important references, were clear and sound reasons given for the choice of these papers?)</i>		1	
Total (out of 30)			

The UP library's initiatives

Formative assessments is when users receive constant feedback to improve and modify their learning

- In-class/virtual discussions
- Practical sessions
- Practical assignments
- individual topic assignments

Library ClickUP module example

Library Undergraduate (UG) 2021

General Information

Welcome

Trainer/Information Specialist

Training Content

Training material

Useful tips and guides

Additional Resources

Subject guides

Training material

Theme 1 A↓

Basics on how to navigate the online library are provided as part of the overview. In this folder, you will find information and videos on:

- How to use the library page for the first time
- Where to find and how to use subject guides

Theme 1

Enabled: Statistics Tracking

Basics on how to navigate the online library are provided as part of the overview.

In this folder, you will find information and videos on:

- How to use the library page for the first time
- Where to find and how to use subject guides

Track statistics

Theme 2

Availability: Item is hidden from students.

Enabled: Statistics Tracking

Information on how to prepare for an assignment is provided in this activity.

In this folder, you will find information and videos on:

- Analysing an assignment
- Identifying keywords to use to search for information for assignments

Adaptive release

Theme 3

Availability: Item is hidden from students.

Enabled: Statistics Tracking

Information on how to research information for assignments are provided in this activity.

In this folder, you will find sub-folders containing information and videos on:

- Books
- Journals
- Databases
- UP's repository

Assessment example

INSTRUCTIONS

Description

The purpose of this survey is to get an indication of what you already know and what you want to learn. The questions may be randomized (e.g. question 5 may appear first or be followed by question 1). You will have a chance to complete all the answers

Please take the time to complete it as it will help me and you. I need to know how much you know already and how I can improve your relationship with information, assignments and research in general. Please help me help you.

Timed Test

This survey has a time limit of 20 minutes.

Timer Setting

You will be notified when time expires, and you may continue or submit.

Force Completion

This survey can be saved and resumed later. The timer will continue to run if you leave the survey.

Click **Begin** to start: Short introductory survey: What do you know?. Click **Cancel** to go back.

You will be previewing this assessment and your results will not be recorded.

Click Begin to start. Click Cancel to quit.

Cancel

Begin

Blackboard Ally

Accessible content with Ally

Hi L (Lesego),

Ally automatically scans your original content and generates [alternative formats](#) but your help is needed to ensure these alternative formats are high quality!



Ally shows [accessibility indicators](#) for each file and provides you with guidance on how to improve their accessibility.

To find out more:

[Watch a video about File accessibility](#)

[How do accessibility scores work?](#)






Don't show this again

Helpful?  

Download alternative formats

Selected item:




 Theme 1

-  ePub
For reading as an e-book on an iPad and other e-book readers
-  Electronic braille
BRF version for consumption on electronic braille displays
-  Audio
MP3 version for listening
-  BeeLine Reader
Enhanced version for easier and faster on-screen reading
-  Translated version
A machine translated version of the original document

 [Help](#)

Slack for communication



- Dedicated channels for different topics, groups or teams
- Web, Desktop and Mobile App versions
- Access to historic projects, teams and chats
- Direct messages to individuals or teams
- Individual mentions for easy following
- File sharing
- App integration (e.g. Google Drive and Polly)
- Voice and video calling*

Technical Comm...   

Channels

- # assignment4
- # exam
- # general
- # latex
- # polls
- # random
- + group_def
- + group_mno
- + group_pqr
- + group_ghi
- + group_abc
- + group_jkl
- + group_stu
- + Add channels

Direct messages

o Franco Pretorius ☆  

o Franco Pretorius
Franco Pretorius
Punny guy


This is the very beginning of your direct message history with @Franco Pretorius. Only the two of you are in this conversation, and no one else can join it. [Learn more](#)

Wednesday, June 24th ▾















o Franco Pretorius 5:41 PM
Hi Lesego!

o Lesego Makhafola 5:41 PM
Hello Franco!

o Franco Pretorius 5:43 PM
Here are the dates for the fake assignment that I created (don't worry, I checked to allow late submissions):
Assignment_dates.png ▾

Start date ⓘ
24-Jun-2020 

Message Franco Pretorius

Make calls

Mention people, send emoticons, attach files

Toggle between workspaces
Create a new workspace

Channels you are a part of/
create a new channel

Send messages to individuals

Personal Space for drafts



Lesego Makhafola (you) ●

Lesego Makhafola

I am the gateway to information

This is your space. Draft messages, list your to-dos, or keep links and files handy. You can also talk to yourself here, but please keep it on the right sides of the conversation.

Jot something down



Add a file from...



Google Drive



Your computer

Polly in Slack

Thursday, July 16th ▾



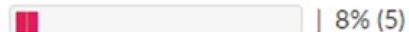
Polly APP 6:05 PM

(Be honest!) How have you been preparing for tomorrow's exam?

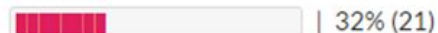
You may vote for multiple options

1 2 3 4 5
6 7 8 9 + Add Option

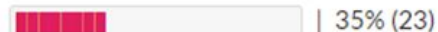
1: By doing nothing—I feel perfectly confident in my abilities!



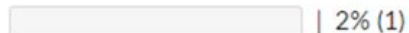
3: Going through my previous mistakes



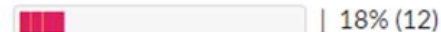
5: Reading the Guidelines



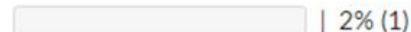
7: Redoing the referencing practical



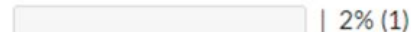
2: By doing nothing—I feel tired from the other exams



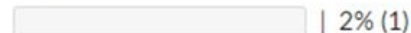
4: Fixing/rewriting my previous assignments



6: Redoing the formatting practicals



8: Reading books/articles to improve my English



Benefits of eLearning

- Accessibility (access from anywhere; learning takes place at user's convenient location and time)
- Personalization
- Flexibility
- Trackability
- Microlearning (snippets of info, choose what you want to learn “bits and pieces of information”)

Self-Paced Learning Outcomes

- Improve long-term recall/ knowledge
- Inform instruction
- Provide evidence of learning
- Reduce anxiety
- Build on content mastery
- Lifelong learning
- Reduced search/research time
- Improved quality of outputs (assignments, reports, etc)
- Digital-, Media-, Trans literacy

Learning Center

- Basic Enquiries : Hybrid (physical, online, Whatsapp)
- Assignment support
- Database searches
- Individual training
- Venue bookings (virtual booking system)
- FLY ,FLY Higher, Education Innovation, Student Advisers, Tutors, SRC, Disability Unit and Faculties, etc.
- International student office to market and present library product and services, and establish user needs.
- development and updating of the AIM library module
- Orientation week and other programs
- Ask/chat to a librarian

Frequently Asked Questions

LibAnswers

Search

All Results:

Showing 1 - 20 (of 66)

Sort By ▾

1 2 3 4 >

Current Filters Topics (most frequent): "Library Services" Groups: "General FAQs"

✕ Remove all

[How do I get access to the prescribed books in the library during the lockdown period?](#)

Last Updated Sep 09 2020, 03:38pm | Topics [National Lockdown](#) [Library Services](#)

[How can I find eBooks for my assignments?](#)

Last Updated Apr 23 2020, 01:59pm | Topics [Library Services](#)

[How do I use Google Scholar to find information for my assignment?](#)

Last Updated Apr 23 2020, 01:17pm | Topics [Library Services](#)

[Can I upload a thesis/dissertation onto the Figshare Research Data Repository?](#)

Last Updated Apr 29 2020, 01:02pm | Topics [Library Services](#)

[How do I navigate wikipedia on the library's website?](#)

Last Updated Jan 12 2022, 01:24pm | Topics [Library Services](#)

[How do I book a study space in the library](#)

▼ Topics (most frequent)

- Library Services (66)**
- National Lockdown (17)
- Coronavirus Disease (COVID-19) (8)
- Access (3)
- Research Data Management (RDM) (3)
- Facilities (2)
- Circulation (1)
- Research (1)

▼ Keywords (most frequent)

- National Lockdown (12)
- Corona (8)
- Coronavirus (8)

Contact Us

 [Chat to a Librarian](#)

 [Ask a Librarian](#)

 WA +27 66 509 1285

 library.enquiries@up.ac.za

 [Staff A-Z](#)

 [UP Library Services](#)

 [@UPLibrary](#)

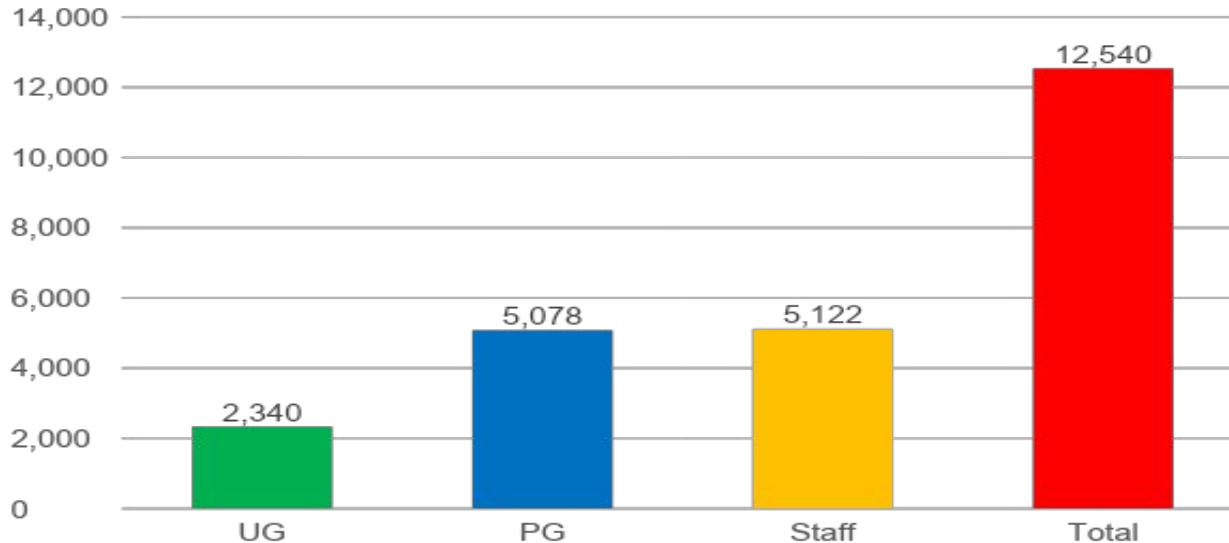
Research Commons

- Basic Medical Sciences, Merensky 2, Education and Veterinary Libraries
- Research facility for Masters, PhD students, Postdoctoral Scholars, as well as UP Staff.
- Virtual support on various modes
- Information literacy and research literacy interventions
- It combines research and social space that contributes to social dialogue, scholarly exchange and intellectual development.

Information Specialists Training

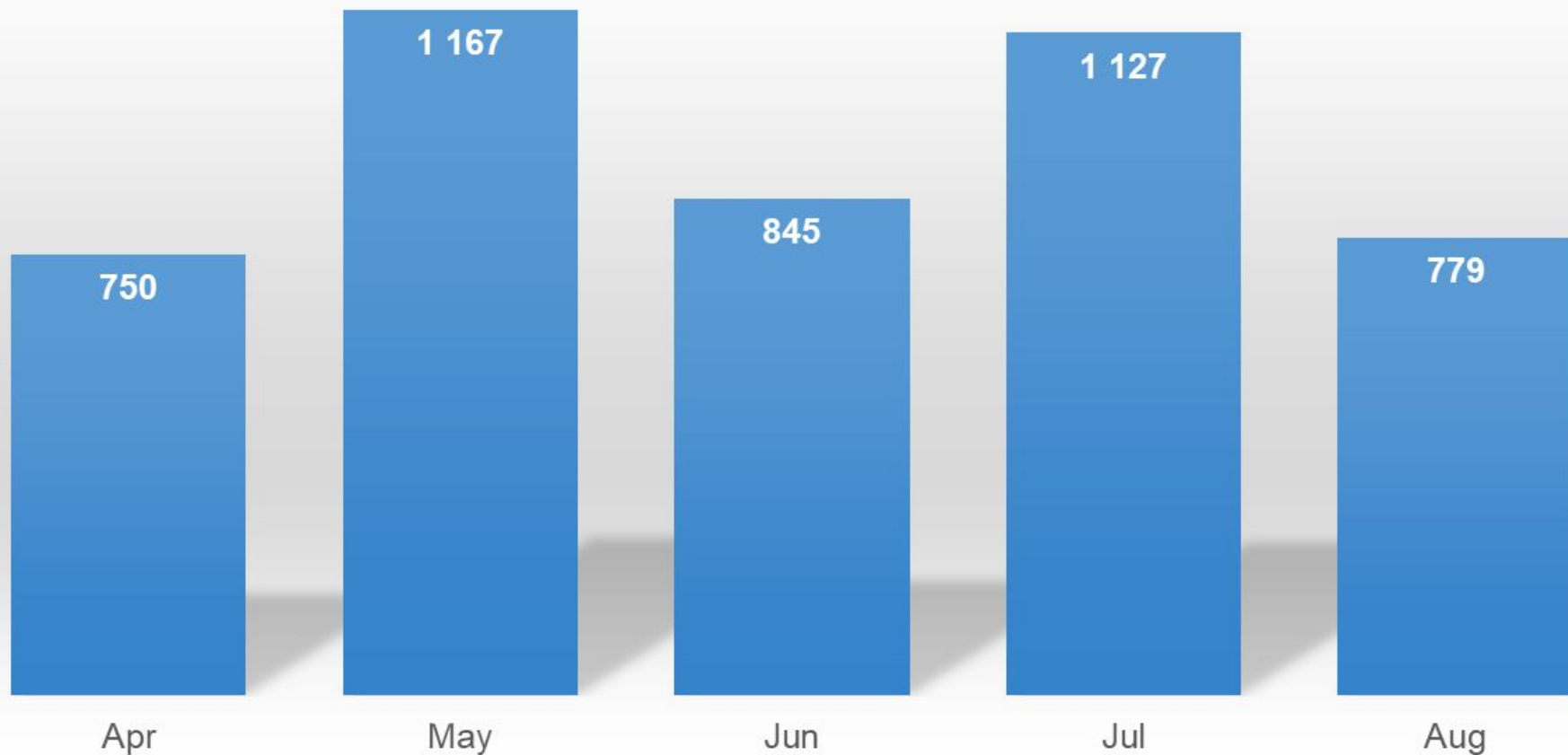
- Awareness on library services and products
- Improving information discovery and information use skills
- Training for academic courses with examination.
- Subject-specific consultations (research interviews)
- Subject-specific database & information resources training

Consultations with Information Specialists

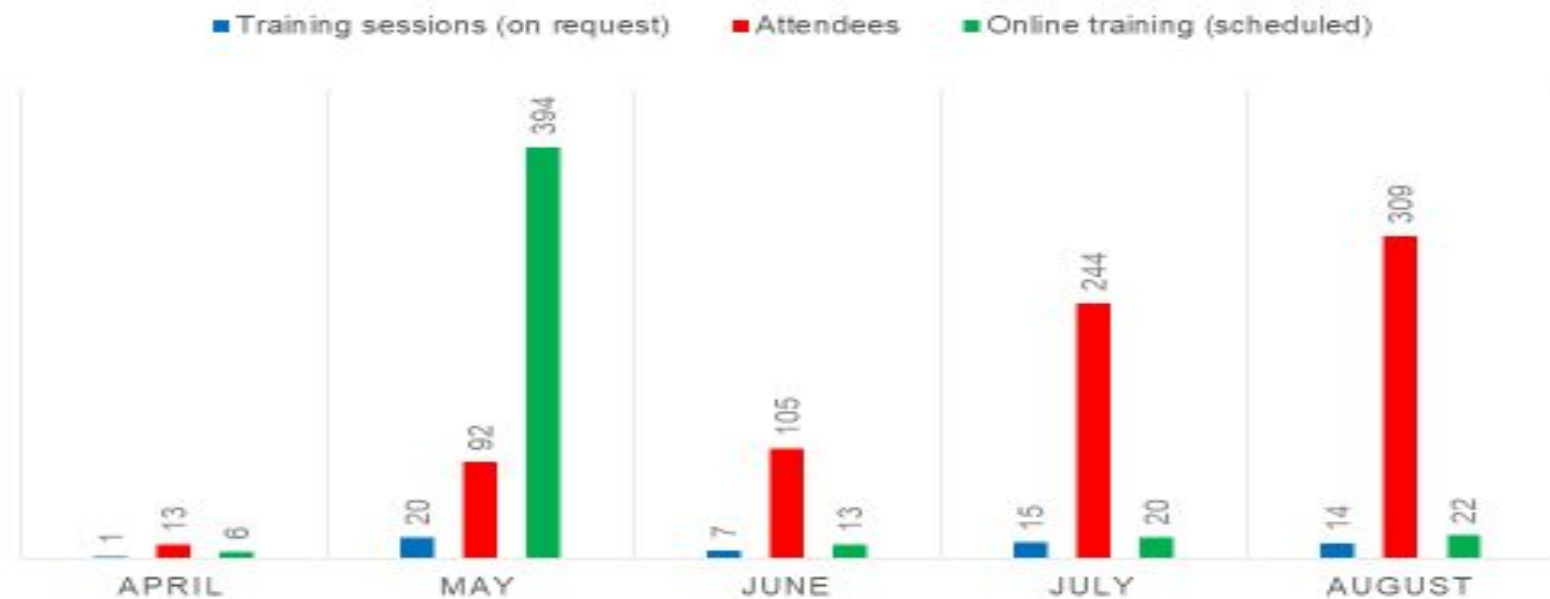


There was a total of 12 540 consultation sessions with Information Specialists, Postgraduate students and staff members consulted more than the undergraduate students.

Information specialists answered a total of 4 668 short enquiries from postgraduate students from April to August 2020 resulting in a monthly average of 934 enquiries per month from postgraduates.



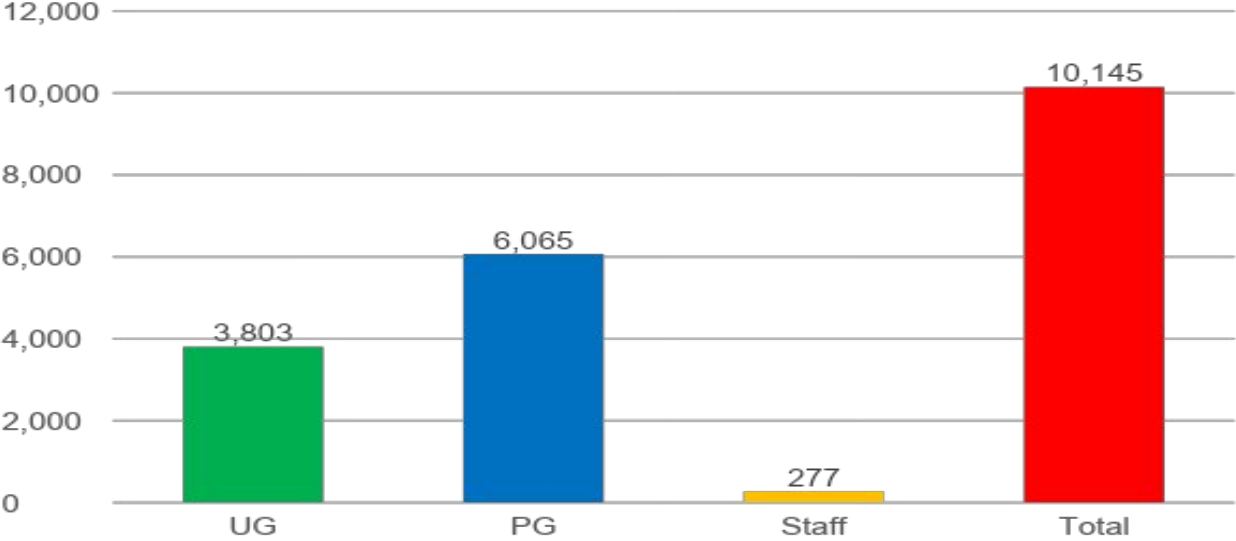
Postgraduate training



The library reached 763 (6%) postgraduate students through training during lockdown.

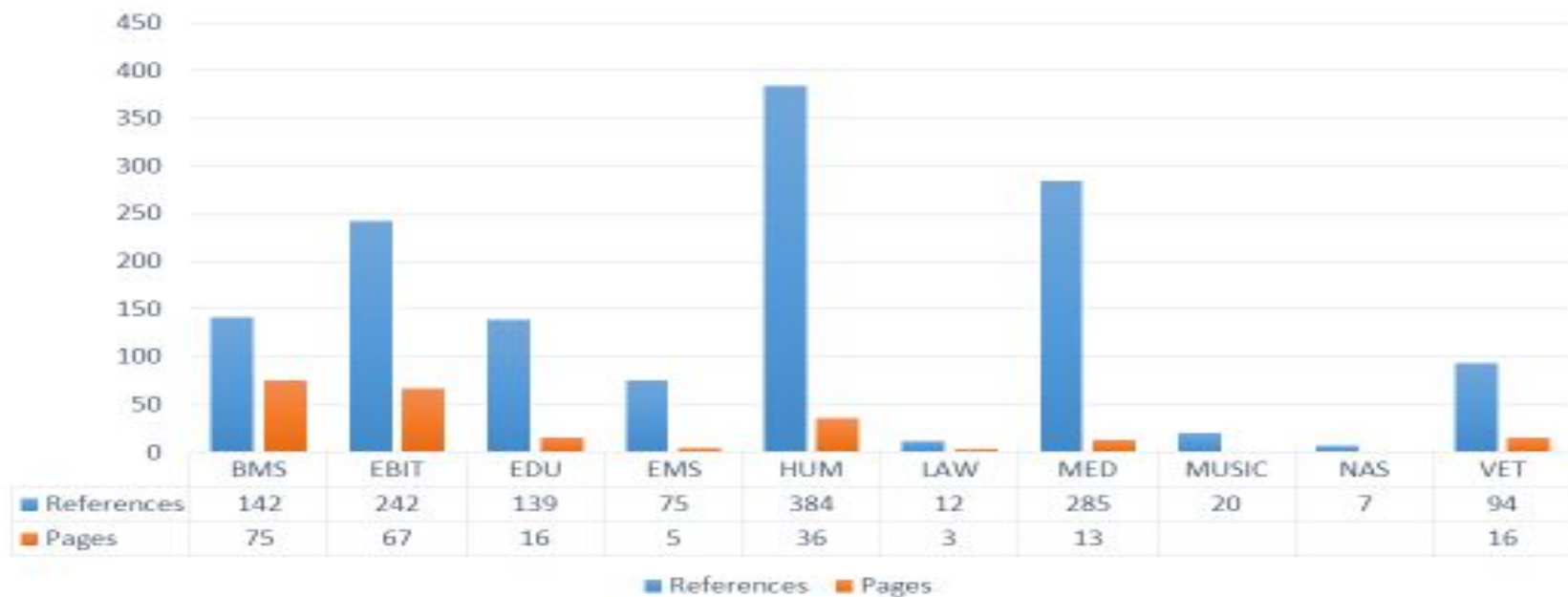


Training Attendance

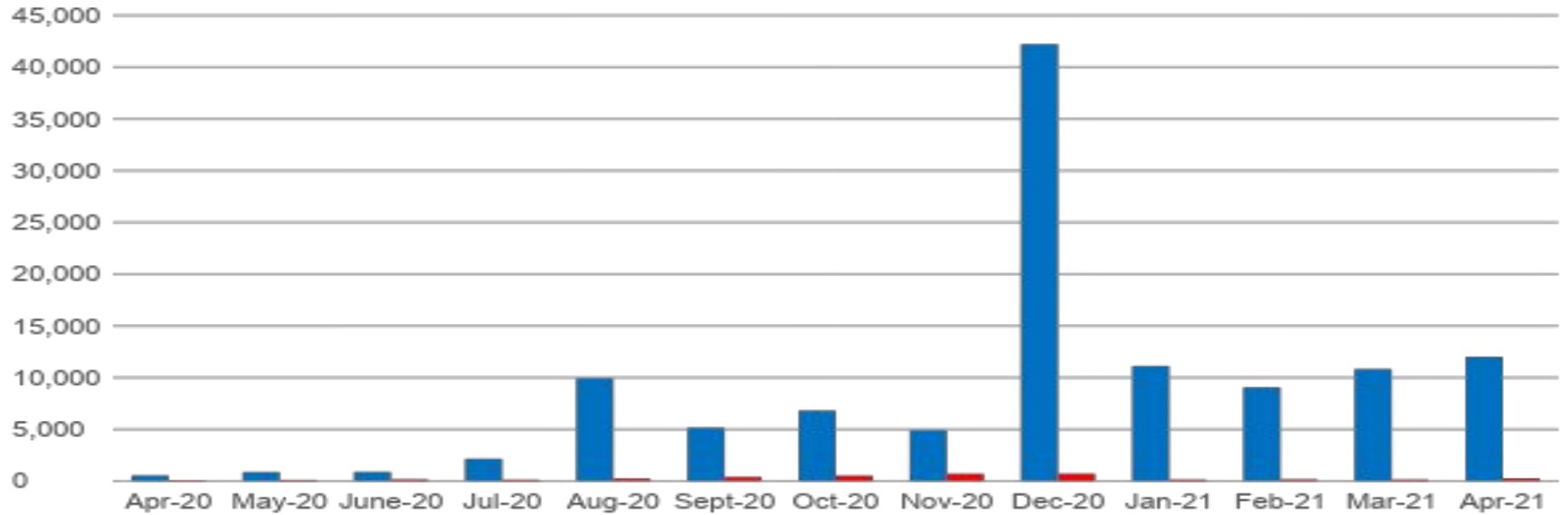


Postgraduate students attended more training than the other user groups during this period. 10 145 in total attended training, inclusive of staff..

ClickUP



Research Data Management: Figshare



3864 item downloads and 116 597 views.

Subject guides navigation

The screenshot displays the 'Guides List' page on the University of Pretoria Library Services website. The page includes a search bar with a 'Search' button and navigation tabs for 'ALL GUIDES', 'BY SUBJECT', 'BY YEAR', and 'BY DEVICE'. A list of subject guides is shown, including 'Accounting', 'Access and Discovery', 'Access and Lending', 'Accounting', 'Accounted Journals', 'African Languages', 'African Studies', and 'International Development Studies and Social Sciences'. A yellow circle highlights the 'A-Z' link in the 'A-Z Database List' section, which is titled 'Full list of databases the library subscribes to including the access:'.

Subject-specific guides

Theology: Practical Theology: Home

This subject guide offers resources and library services on Practical Theology. Please evaluate material on web sites critical and use peer reviewed, scholarly information.

Home	Postgraduate Guide	Contextual Theology	Locate - Bibles	Practical Theology - Overview	Pastoral Care - Overview	Counseling - Overview	
Topics in Pastoral Care	Youth ministry	Liturgical Studies	Worship (Homiletics)	Leadership	Poverty: Urban Leadership	Data & Statistics & Maps	Find Books
Find Articles - Journals and Newspapers	UP Repository	Faculty Reference Guide	Faculty Writing Guide	Need help?	Training	Exam Papers	



[Christine Nel](#)

Information Specialist

[Email Me](#)

[Sorry, chat is Offline](#)

[Schedule Appointment](#)

Other Theology Subject Guides

- [Christian/Theological Ethics](#)
- [Contextual Theology](#)
- [Historical Theology](#)
- [Missiology](#)
- [New Testament and Related Literature](#)
- [Old Testament and Hebrew Scriptures](#)
- [Practical Theology](#)
- [Spirituality](#)
- [Systematic Theology : Dogmatics](#)

This research guides highlight the major reference works, literature and electronic resources, and more within given subject areas.

- [Theology and Religion Open Sources \(Alumni\)](#)

The subject guide aims to provide access to a variety of quality open access content that is useful for all our clients, especially those that may not have full access to our subscription resources. The resources are current and relevant for research.

Subject-specific guide content examples

Chemical Engineering: Library training

This guide provides students, researchers and staff with access to subject and information resources.

[Home](#)[Search for Books](#)[Find articles](#)[Recommended databases & Web-Links](#)[Interlending](#)[Referencing](#)[Research Tools](#)[Library training](#)[Standards](#)

Videos

- [Overview of the UP online library](#)
The video provides guidance on how to use the online library interface and how to search for library material using the multi-search box.
- [How to place a hold on a book](#)
The video takes you step-by-step through the process of placing a hold on a book if it is checked out and you want to be the next user
- [Searching for journals](#)
The video shows how to find a journal using a reference.
- [Searching for articles](#)
The video shows how to find an article from a journal using a reference
- [Citing and referencing](#)

Interesting reads and links

- [Twenty things I wish I'd known when I started my PhD](#)
Recent PhD graduate Lucy A. Taylor shares the advice she and her colleagues wish they had received.
- [As a PhD examiner ... My top 25 tips for PhD students](#)
The article provides insight into some of the things that examiners are looking at when evaluating research documents.
- [14 essential PhD questions answered](#)
" expert on doctoral education, Professor Brabazon's articles for THE, including 10 truths a PhD supervisor will never tell you and How not to write a PhD thesis have been read hundreds of thousands of times, so we asked her to expand on the issues in a series of videos.

The questions that she answers in the short videos that follow were sourced from PhD candidates via the @timeshighered

Presentations

- [Postgraduate training presentation 2022](#)
- [Water utilization presentation](#)
- [Conducting a literature review](#)
This presentation is for when you decide to undertake any research task and need to do a literature search.
- [3rd year Prac with Endnote](#)
- [Literature review: CSC 411 presentation](#)

Library training schedules

- [Undergraduate training schedule](#)
- [Postgraduate training schedule](#)

Alumni Guide

Alumni Guide: Open Sources by Subject

This guide is developed to assist our UP Alumni community.

[Home](#)[Alumni Membership - Library Privileges](#)[In-Library Access & Services](#)[A-Z Databases: In Open Access](#)[Open Sources by Subject](#)[Faculty Research Output Collections](#)[Archival & Special Collections](#)[Non Research Divisions](#)

Off-Campus Database Access

Due to licensing agreements and authentication issues, most article databases with paid content are restricted to current students, faculty and staff.

- [A-Z Databases](#)

List of subscribed databases.

Limited content is available to alumni.

Depends on the alumni membership category and it is ON CAMPUS ACCESS ONLY.

Open Sources by Subject

Education	Engineering, Built Environment & IT	Economic and Management Sciences
Health Sciences	Humanities	Law (under construction)
Natural and Agricultural Sciences	Theology and Religion Studies	Veterinary Science

Open Resources Guide: Faculty libraries

Engineering, Built Environment and Information Technology Open Resources: Open Books, Journals & Databases

This guide provides links and information to and about openly available information and educational resources in the Engineering, Built Environment and Information Technology fields.

[Home](#)[Information Specialists](#)[Research tips & tricks](#)[Open Books, Journals & Databases](#)[Open Repositories](#)[Publishing & Referencing Info](#)

What's it in the Open Books, Journals & Databases tab?

This page provides links and information to and about openly available Books, Journals and Databases in the Natural and Agricultural Sciences fields. **General** refers to sites that contain resources across multiple disciplines. Users can select a subject or area of interest once they open the resource.

Open Books

General

- [Directory of Open Access Books](#)   
- [Open Textbooks Library](#)
- [Milne Open Textbooks](#)
- [University of Toronto Books Online](#)  

- [IntechOpen](#) 
Engineering and Technology books

- [OAPEN](#)
OAPEN promotes and supports the transition to open access for academic books by providing open infrastructure services to stakeholders in scholarly communication.

Engineering

- [Springer Open Access Engineering Books](#) 

Open Journals and Journal articles

General












- [Directory of Open Access Journals \(DOAJ\)](#)     
- [LinkOut \(NCBI\)](#)  
- [CORE](#) 
The world's largest collection of open access research papers

Engineering

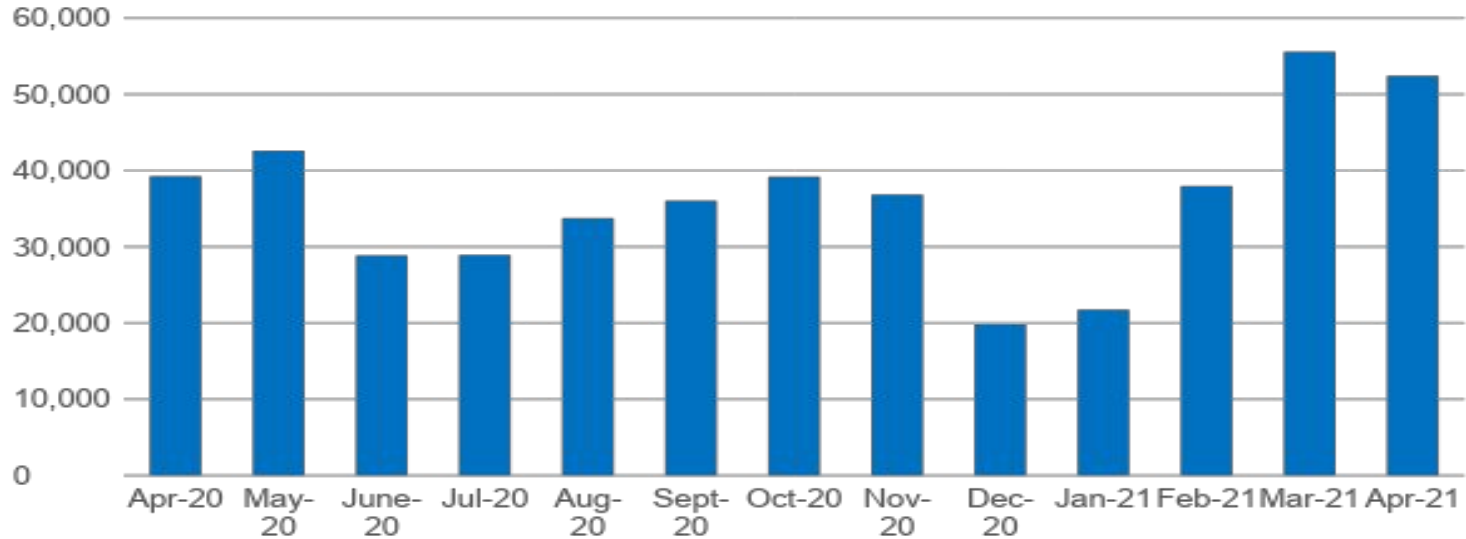
- [Natureprotocols](#)
- [Geotechnical Research](#) 
- [Omics Online](#) 
- [JVE Journals](#) 
- [CivilEng — Open Access Journal](#) 
- [The Open Civil Engineering Journal](#)
- [Open Journal of Civil Engineering](#)

Open Databases

General

- [BioMed Central](#)    
- [PubMed Central®](#)  
- [J-STAGE](#)  
- [Taylor & Francis Open Journals](#) 
- [Internet Archive](#) 
Internet Archive is a non-profit library of millions of free books, movies, software, music, websites, and more.
- [Hathi Trust Digital Library](#)
- [OER Commons](#)
Covers the following subjects areas among others:
Architecture and Design, Computer Science, Engineering, Environmental Science, and Information Science
- [JSTOR open](#) 
Covers journals and books

Subject Guide Views



155 published guides there was a total of 472 981 views. The highest viewed subject guides was:

Top 10 most viewed subject guides

Guide Name	Total
Research Guide	175 438
Theology: Old Testament and Hebrew Scriptures	47 691
Theology : Systematic Theology / Dogmatics	23 183
EndNote	22 062
Exam Papers	16 551
Theology & Religion: Postgraduate Studies	11 498
Chemistry	9 687
Theology: Historical Theology	8 777
Religion Studies: Islam	8 663
Research Data Management (RDM)	8 653

Lessons Learned

- Library must provide personalized learning for users
- Users must control the management of the content and choose their engagement
- Blackboard training is required
- Proper planning and implementation takes time
- Adaptation to the current learning environment is important
- Constant feedback is important
- Multimedia content
- Accessibility issues need to be identified & resolved
- Information Specialists' upskilling, Digital, Media literacies, etc.
- Library must play an active role and promote information literacy as an important component of learning content on first year level for accreditation points at the DHET
- Collaborations, partnerships, team work, and benchmarking

WAYFORWARD

- High-Flex Learning Model for library instruction and self-paced learning
- How do we support the model with regard to research, teaching and learning
- Synchronous: Training in real time, virtual, instant, group, collaborative
- and
- Asynchronous library services: Pre recorded training videos, learners complete training in their own time, flexible, cost effective, more groups accommodated for training,

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THANK YOU

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