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Date: August 3rd, 2022

Venue: Online

www.biust.ac.bw

BIUST | *Driving Change*





TALKING OUTLINE

- **Overview of BIUST**
- **BIUST library services**
- **Carpentry Instructor training**
- **Information literacy (IL) at BIUST**
- **Key action items**



BIUST QUICK FACTS



Established in 2004 but became operational in 2012

Its mandate is to:

- Invest on Science, Technology and Engineering (STE)
- Produce skilled human resource in STE fields and localise the posts.
- Reduce costs for students studying abroad ; more opportunities for students to study locally .
- Increase scientific research output in order to promote inventions and innovation

Two Faculties

- Focus on areas of engineering, science and technology

One centre

- Focus on equipping students with both entrepreneurship and academic skills

One thousand five hundred and seventy-six (1576) undergraduate and three hundred and fifty-four (384) postgraduate students

Provides resources and services that are:

- Aligned to the university's strategic goals
- Responsive to user information needs

Three sections

- Director's office, Resource management and information support

Services

- Collection building (Print and E-print)
- Reference services
- Institutional repository
- Interlibrary loans
- Learning commons
- Library- Faculty liaison
- Research Information Services
- Information literacy sessions

Carpentry Instructor training :

- Organized by CarpentryConnect South Africa 2021
- It was 5 days online training

Why attending the training

- To improve data science skills and to develop new skills
- Training focused on building teaching skills, how learning works and creating a learning environment

Course Content:

- Building skill with practice-how learning works
- Creating motivating environment for learners
- Enhancing equity, inclusion and accessibility in your workshop
- Live coding practice sessions (peer teaching peer)

Teaching and Assessment Strategies

- Collaborative learning
- Continuous feedback
- Participatory live coding
- Exercises activities

Overview of IL:

- Embedded fully into Technical Communication and Academic Literacy module (101,102 &201) under the unit of Academic Literacy and Social Sciences (ALSS)
- The module focus on the development of competency in the four language skills of speaking, listening, reading, writing and other academic skills such as note-taking and equipping students with Information Literacy skills to enable them to search for information and use it effectively for academic purposes.
- Compulsory six credit module for all first-year students of faculty of science and second year students of Faculty if Engineering
- Undertaking during semester one, two and three during week three to five
- Scheduled for one hour session for each group



Delivery of IL sessions:

- Blended learning-face to face instruction is integrated with technology , e.g.
 - Online teaching through blackboard platform
 - Padlets
 - Podcasts and vodcasts

IL sessions content

- Information Basics
- Information Sources
- Library Research/Access Tools
- Evaluating Information Sources
- Search Strategies
- Academic Integrity

Teaching and assessment strategies

- Lecture; Demonstration
- Interactive teaching; Reciprocal questioning-learning strategies
- Assignment; Test; Examination

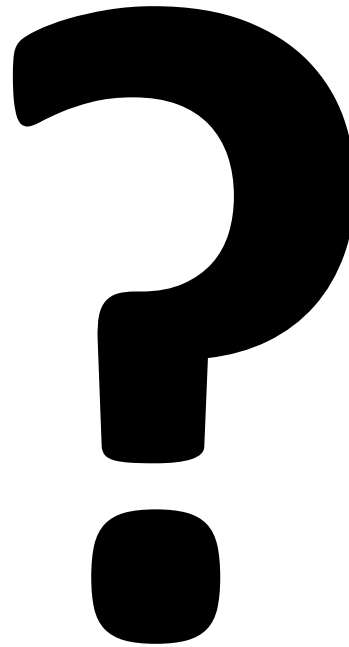
Comparison of Carpentry workshops and ILS at BIUST Teaching Styles

ILS at BIUST	Carpentry workshops
Individual learning	Collaborative learning (Breakaway rooms)
Instructor run through the a series of PowerPoint slides assuming that all students are keeping up	Instructors pace the workshop according to the needs of the actual learners
Assessment is done at the end of the session	During the sessions learners are given challenges to test what they have grasped
Demonstrations	Participatory live coding
Lecturer-student teaching style, facilitated by professionals	Peers teaching peers, instructors are volunteers

Carpentry workshops were established to meet the high demand of data literacy skills that has been brought by the increase of data, therefore this shows that data literacy is an essential competency as information literacy.



What next.....





Where are we:

- Transition from information age into big data era
 - Creation of massive dataset
 - Data intensive science/research consists of capturing, curating and analyzing
 - This led to developing researchers' skills (programming and analytical) to carry out basic research

Are we on board-data literacy skills at BIUST library

- Library carpentry learners (4)
- Data carpentry learners (3)
- Carpentry maintainer (1)
- Carpentry Instructor (1 Incomplete)



What about the user community we serve :

....there is data literacy skill gap

Key action items are:

In order to meet the needs for data literacy among BIUST scientific research community we should:-

- Apply skills learned at the carpentry workshops
- Adopt carpentry workshops teaching model/practices
- Incorporate data literacy content in IL programme
- Introduce carpentry workshops internally targeting postgraduate students and research community
- Employ peer to peer mentoring



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