

SADiLaR Awareness and Capacity Development Proposal

July 2017 - March 2018

(Developed by Juan Steyn & Anelda van der Walt)

Background

Researchers, students, and librarians are increasingly starting to engage in projects with more complex computing components to harness the power of larger and often open datasets and technology. Those who are interested in pursuing Digital Humanities projects often find themselves in unknown territory without a clear idea of a good starting point for acquiring new skills or finding potential collaborators. One of the aims of SADiLaR is to build local communities to both facilitate collaboration and skills transfer.

This proposal builds on the past two years' successes of Software, Data, and Library Carpentry workshops in reaching audiences largely new to computing and big data that has been achieved in Southern Africa. The Carpentries are related non-profit international initiatives that develops open training material, run workshops, run train-the-trainer events, and supports the values of Open Science and collaboration.

In 2014 and 2015 several workshops were run in Southern Africa where researchers, students, and support staff were introduced to tools supporting reproducible research through Carpentry workshops. This was followed by a 12 month programme that kicked off in 2016 with an instructor training event followed by more workshops taught by newly qualified instructors. The model proved to be more successful in terms of building and sustaining local capacity than traditional single event workshops. Over the past 30 months 60 researchers and students have participated in instructor training events with more than 500 participating as learners in Carpentry workshops all over South Africa and in Namibia. Many of the newly qualified instructors and instructors in training were learners from previous workshops.

This proposal may serve as model for capacity development initiatives in other SARIR platforms as all materials will be available under open licenses and will be embedded in community development.

An international awareness campaign about these capacity development initiatives will be launched through the publication of blogs, Twitter, and academic publications.

International input will also be sought to ensure the training is aligned with other similar initiatives around the world.

Overview of proposed awareness and capacity building workshops

While previous Carpentry workshops mostly offered subject agnostic learning opportunities, workshops in this proposal will specifically be tailored to newcomers to the Digital Humanities.

Topics will include for example:

- Introduction to Digital Humanities including an overview of different existing DH focus areas with project examples related to the specific audience;
- Introducing existing training opportunities and resources (e.g. the dh-southernafrica repository currently under development)
- Research Data Management
- Data formatting, cleaning, and manipulation
- The use of existing data repositories to augment research (e.g. the RMA)
- Introduction to R or Python for analysing data
- Introduction to databases (SQL)
- Other relevant tools can be covered on a per site basis.
- Community building

Due to the transdisciplinary nature of Digital Humanities projects, workshops will be open to researchers and students from all research fields, including engineering, STEM, social sciences, and others.

Sustainability and Outcomes

The main aims of the workshops is to further develop the Southern African DH community and to build foundational DH capacity through participation in and extension of local and international initiatives. Workshop participants interested in becoming instructors will have an opportunity to apply for instructor training through the official Carpentry process.

This capacity building initiative will be embedded in an existing ever-growing community, that encourages participation in various ways (for example: learner, instructor, helper, lesson material contributor, workshop organiser, host, and other). There are over 700 instructors worldwide and large active Carpentry communities in the

USA, UK, Europe, Australia, New Zealand and South Africa. Learners will be introduced to existing DH initiatives through CLARIN, the Research Data Alliance, the Digital Humanities Association of Southern Africa, and others.

Workshop format

The two and a half day hands-on workshops will be run at various locations in South Africa. Participants will be encouraged to bring laptops along to allow for active participation during the sessions. Freely available and open software and resources will be installed on laptops in order to increase uptake of new skills.

Workshops will be taught by local instructors from various regions in Southern Africa in collaboration with colleagues from abroad. This strategy will allow the further expansion of local capacity and will aid in the development of a diverse community with strengths and experiences in a variety of areas. Every workshop will have at least two instructors and a number of helpers who will ensure participants do not fall behind during the intensive hands-on training.

Teaching methodologies and the structure and content of the workshops will build on Software, Data and Library Carpentry and other initiatives such as the Programming Historian, 23 (Research) Things, and other.

Participants

Anyone interested in DH and reproducible research utilising computational methods will benefit from these sessions. It can therefore include researchers and students, librarians, IT staff, citizens and others. Collaboration especially interdisciplinary collaboration lies central to most DH projects and initiatives, these workshops therefore encourage participation from a broad audience.

Proposed schedule regions: July 2017 - March 2018

Region	Workshop Site	Planning stages
Natal	UKZN	
Eastern Cape	Fort Hare	Preliminary Discussions Started
Gauteng	Liasa Conference	Preliminary Discussions Started

Northern Province	UL / UNIVEN	Preliminary Discussions Started
Free State / Northern Cape	UFS	
North West Province	NWU	Preliminary Discussions Started

Workshop Budget

Each workshop will have unique requirements and costs associated due to the diverse environments. An average estimate per workshop is detailed below. An assumption of 35 participants per workshop including instructors and local helpers who assist participants during the workshop is made. Workshop costs could range from around R10,000.00 (where local instructors are available and low budget catering is provided) to around R50,000.00 (where an international instructor teaches with a local instructor and full catering is provided). An example budget is provided below.

Provided a total of six workshops is run between July 2017 and March 2018 at an average of R25,000.00 per workshop, a total amount of R150,000.00 will be required for the full proposal. It is important to note that some workshops will benefit from co-funding opportunities by ongoing national Carpentry initiatives as well as other DH capacity building initiatives.

If this initiative reaches between 20 - 40 participants per workshop the cost per participant will be less than R1,000.00 per participant per two and a half day workshop.

High Cost Scenario with international instructor	Days	Number of people	Amount	Total
International Instructor flight	NA	1	R 15,000.00	R 15,000.00
International instructor accommodation	3	1	R 1,000.00	R 3,000.00
International/SA instructor ground transport	3	1	R 500.00	R 1,500.00
South African instructor flight	NA	1	R 3,000.00	R 3,000.00
South African instructor accommodation	3	1	R 1,000.00	R 3,000.00
Catering (40 people including participants, helpers, instructors)	2.5	40	R 180.00	R 14,400.00

Software Carpentry Fee (could request a fee waiver)	NA	NA	R 10,000.00	R 10,000.00
Stationary	2.5	40	R 5.00	R 500.00
AV/IT Support (some universities charge)	2.5	1	R 400.00	R 1,000.00
Other	NA	NA	NA	R 400.00
Estimated cost per workshop				R 48,800.00

Sources

- <https://doi.org/10.6084/m9.figshare.6290903.v1>
- A Programme for the Development of Computational and Digital Research Capacity in South Africa and Africa - <https://doi.org/10.6084/m9.figshare.3382168.v1>
- 23 (Research Data) Things - <https://ucsdlib.github.io/23-Research-Data-Things/>
- Software Carpentry - <https://software-carpentry.org/>
- Data Carpentry - <http://www.datacarpentry.org/>
- Library Carpentry - <https://librarycarpentry.github.io/>
- DH Southern Africa Capacity Building - <https://dh-southernafrica.github.io/Capacity-Building/>
- Programming Historian - <http://programminghistorian.org/>

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