Virtual Platforms for Research and Collaboration

RCCPII eConversation Series 23 March 2018 Anelda van der Walt Erika Mias

About RCCPII

The Rural Campuses Connection Project (RCCP) has been running since 2010. The project is funded through the Department of Higher Education and Training, managed by Universities South Africa, and implemented by the Tertiary Research and Education Network.

More information is available at the <u>RCCP</u> website.

RCCP I specifically focussed on providing network connectivity to rural and peri-urban campuses of South African public universities.

RCCPII included both the networking aspect and capacity development to enable university staff and students to maximally benefit from these new connections.

About the RCCPII eConversation Series

One of the lessons learned from the early years of RCCP was that travel time, and costs, often prohibit staff and students at rural campuses from participating in off-campus training opportunities.

The <u>RCCPII General eConversation Series</u> is aimed at researchers, support staff, as well as postgraduate students at all public universities in South Africa.

The online eConversation Series will provide participants an opportunity to virtually engage with experts around various topics related to research as well as teaching and learning.

Participants will also have an opportunity to meet peers at other institutions to discuss mutual challenges and solutions related to their work.

The series will be conducted on the Vidyo platform supported by TENET.

Why collaborate online?

Pros

- Extending collaboration to online environments can extend inclusivity
- Online tools allow for more accurate documentation of contributions
- Facilitates national and international collaboration
- Time saving
- Cost saving

Cons

- In Africa we have some additional barriers to online collaboration:
 - Resources such as access to computers, internet speed and access, costs of data can significantly affect online communication if we do not accommodate for these factors.

General Purpose Virtual Platforms

Which platforms do you use at your institution and/or for collaborative research?

Participate in this **poll** anonymously and let us know which platforms you are interested in learning about in more detail:

https://goo.gl/forms/glePZ53hBnxAUGv32

Collaborative Documentation

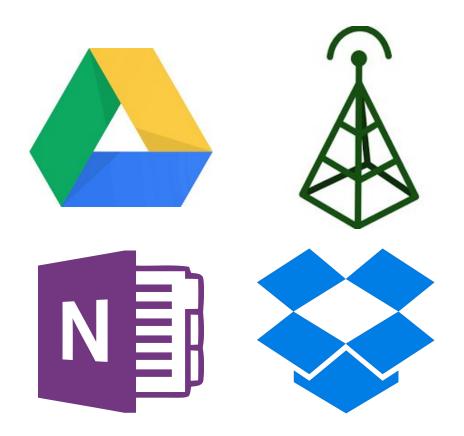
Some commonly used collaborative documentation services are:

Google Drive

Dropbox

OneNote Notebooks

Etherpad



Dropbox Google Drive

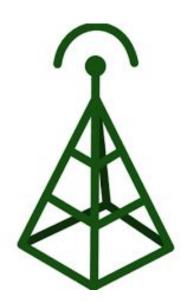
Real time collab. editing	No *	Yes
Offline functionality	Yes	Yes
Known Security Standards	Yes**	Yes**
Business / Free version	Yes	Yes



How to use google drive, beginner's tutorial.

Etherpad

- Free and Open Source Source (FOSS)
- Relatively easy to install on own server
- Cloud service option



OneNote

- OneNote currently only freely available to Windows or <u>Office 365 users</u>. (Check if you institution has a licence.)
- Versatile note taking features includes the ability to:
 - record audio or video while taking notes which allows one to click on the note whilst recording so that later you can jump to the timeframe in the recording.
 - Link to data files
 - Record handwritten notes and drawings.



*Office 365 security paper download

Selecting online collaborative documentation tools is always based on:

- Needs:
 - Fit for use
 - Security

Virtual Meetings

- Vidyo is a videoconferencing platform supported by TENET, <u>find out if your</u> <u>institution is a qualifying organisation.</u>
- Some HEIs have Skype for Business accounts.
- Zoom is a videoconferencing platform being used more frequently by international collaborators



Online Teaching

- <u>Big Blue Button</u> "Web Conferencing system designed for online learning".
 - Features virtual breakaway spaces, user friendly interface for teachers.
 - Read about the Tenet MConf project (using Big Blue Button on <u>Tenet</u> and <u>Mconf/SANREN</u> pages.
- Some HEIs have Adobe Connect licenses
- OBS project
 - FOSS
 - Relatively easy to install.
 - Basic split screen setup for recording online lessons
 - Does transition effects, records audio from multiple sources
 - Option to live broadcast into YouTube or Vimeo.







- NB:
 - UX design and user friendliness
 - Space/Storage

Project Management

Project Management Tools

- <u>Trello</u> is a 'lightweight' tool we use (free version)
 - flexible
 - user/novice friendly
 - Multiple boards
 - Facilitates communication within the project board (reduces emails)
- 2 Plan
 - o an Open Source alternative to proprietary MS Office Products
 - 'Heavyweight' option for more detailed/complex project planning.





- Needs level of detail/process to be captured
- Fit for purpose

Virtual Communication

Commonly used communication platforms

- Email
- Skype (chat and video)
- Hangouts (Chat and video)
- WhatsApp
- Slack*
- Others?**





Communication choices determined by:

- Communication speed
- Level of detail to be communicated
- Formality of communication
- Accessibility
- Needs*

Best Practices and Etiquette

A note on etiquette and best practices:

- Be mindful of other people's time
 - o don't clutter a chat group used for work with unnecessary content
 - Also be mindful of the fact that some communication services are personal services adopted for work (e.g.: WhatsApp) so decide if this type of more relaxed forum is suitable for your needs.
- Do you need a code of conduct?
 - This helps people understand how they are expected to conduct themselves
 - See examples of the <u>SWC/DC/LC code of conduct</u>.
- Check you environment:
 - o If you need to talk online it's best to use a headset with a mic to avoid echos and background noise.
 - Sit in a quiet space where you a less likely to be disturbed
- Participation and engagement:
 - When a presenter/lecture asks for a response try to engage, even if it is just a brief affirmation that the audio/pace of the lesson/content is ok, this helps the person talking feel less alienated from their audience.
 - On't be afraid to ask questions but try not to to eat into presentation time either, some conversations can be taken to another platform.

Virtual Platforms to Aid Research

Online Survey Tools

Did you know that some universities have site-wide licenses available for survey tools?

What options do you have and why go online?

Survey tools:

- LimeSurvey https://www.limesurvey.org/
- SurveyMonkey https://www.surveymonkey.com
- QuestionPro https://www.questionpro.com/ (previously SurveyAnalytics)
- Google Forms free, but limited power

Advantages:

- O Can often be used in offline mode for work in the field
- o Immediate data capturing i.e. more accurate data
- Can make questions *required i.e. more complete data
- Can restrict answers to proposed selections rather than free text i.e. less time spent on data cleaning

Invest the time upfront to develop questionnaires in online software to save many hours and lots of pain later on.

Computing Solutions

Do you need access to more computing resources than what is available on your desktop or laptop or at your institution?

HPC vs Cloud Computing

- Institutional HPC
- CHPC https://www.chpc.ac.za/ and apply at https://users.chpc.ac.za/
 - Training Summer/Winter schools
- Amazon Web Services https://aws.amazon.com/
 - Test for free
- Microsoft Azure https://azure.microsoft.com
 - Azure for research examples -https://www.microsoft.com/en-us/research/academic-program/microsoft-azure-for-research/
- Other international platforms
 - USA Open Science Grid https://www.opensciencegrid.org/

Software as a Service (SaaS)

- CoCalc Collaborative Calculations in the Cloud https://cocalc.com/
- RStudio Cloud https://rstudio.cloud/
- Other?

There are resources everywhere...

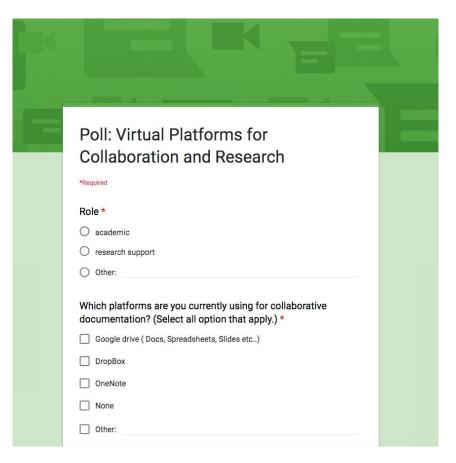
Collaborative Article Writing

Tired of sending around final_draft_20180320-avdw-edited_finalFinal.docx when writing articles together?

Collaborative Writing Platforms & Referencing Tools

- Collaborative writing:
 - Authorea https://www.authorea.com/
 - Overleaf https://www.overleaf.com/
 - Google Docs
 - OneDrive
 - GitHub combined with Markdown or Latex
- Referencing tools:
 - Mendeley https://www.mendeley.com/
 - EndNote http://endnote.com/
 - RefWorks https://refworks.proquest.com/
 - Zotero https://www.zotero.org/

There are pros and cons to using free tools, but paid software also come with problems. Find something that works for you...



Don't forget the poll: https://goo.gl/forms/glePZ53hBnxAUGv32