# Building and supporting a Digital Literacy Training Community: working together and enriching research

Megan Guidry, NeSI Alexis Tindall, ARDC Murray Cadzow, University of Otago Jonny Flutey, Victoria University Wellington Paula Martinez, NIF/UQ/Characterisation Carina Kemp, AARNet









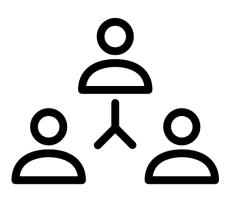






#### Welcome and overview

- What digital skills do researchers want and need?
- Overview of the existing Australian and New Zealand digital skills landscape
- Map pathways for learners and providers to aid efficient and effective training
- Strengthen training community in Australia and New Zealand



#### Brainstorming!

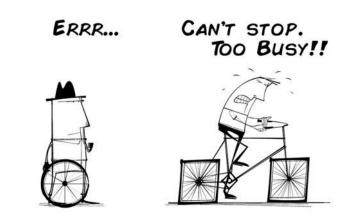
★ Three questions!

★ One minute each!



Photos by Robina Weermeijer (top) and Josep Castells (bottom) on Unsplash

## Which digital skills have made the biggest positive impact on how you work?



What digital skills training is most in demand in Australia/ New Zealand?

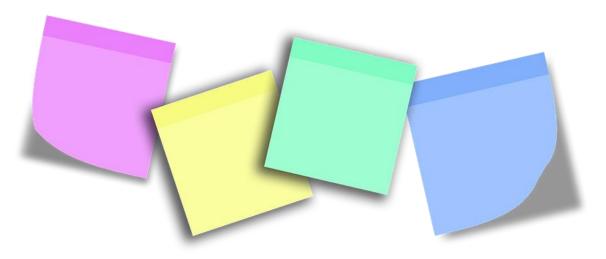


What digital skills training do you wish was higher priority in the research sector?



#### ~ Sharing ~

Lets single out a few of the skills we've written down. Any volunteers want to share?

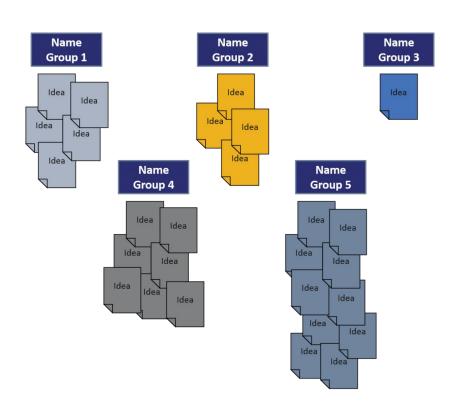


### Everyone to stand up and take a look at the skills on the whiteboard and do one of two things:

 If any of your skills relate to a cluster, stick it up there with the cluster. 2. If any of your skills do not relate to what is already on the board, start a new cluster.

If you start a new cluster, you are the guardian of that cluster -- essentially, just make sure it's tidy and place any repeats together.

#### What themes have emerged?



Time to name our clusters!







Jonny Flutey Victoria University of Wellington

Murray Cadzow University of Otago

Megan Guidry New Zealand eScience Infrastructure

## Skill development provided by institutions and libraries

#### Characterisation



60+ instruments integrated across **Australia** \$250M+ capital

Data and images provided by MASSIVE.org.au

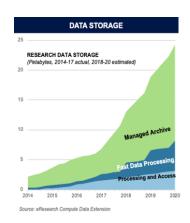


Computing power requirements

perform complex routines that utilise both CPU and **GPU** 



**National Computer** infrastructure Virtual desktop Users from all backgrounds High Performance Computer power New needs



25+ petabytes of research storage **Processing and access** Fast data processing Managed archive integration

#### The Carpentries

#### Australian eResearch environment:

#### Who?

- Digital Data and eResearch Platforms: ARDC,
   AARNet, AAF, National Computing Infrastructure
  - Pawsey
- State organisations: Intersect, QCIF
- Large institutional programs

#### What's emerging?

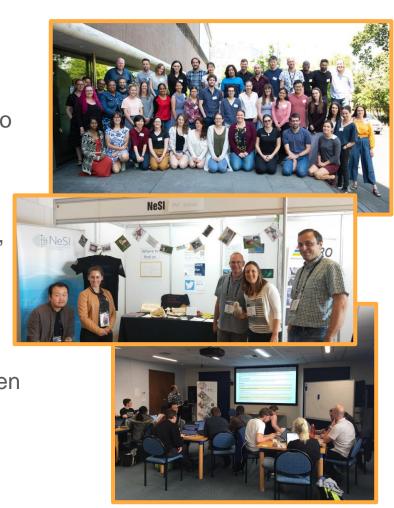
- What's working?
  - Skills Summit 2019
  - ENRICH Community of Practice
  - Series of gatherings at related events
- Interest in collaboration environments comms, reusable materials, register of trainers, calendar
- Opportunities for co-development of curricula
- Collaboration around advocacy, documentation of training benefits

#### eResearch bodies (NZ)

NeSI serves New Zealand Universities and Crown Research Institutions. We have limited resources so strive to empower local communities

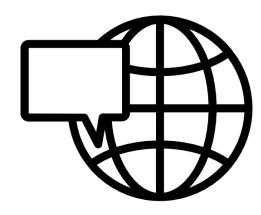
What is working well: Growth in the carpentries.
Local events (ResBaz, FigshareFest, Hacky Hours,
eResearch conference) connecting with the
community

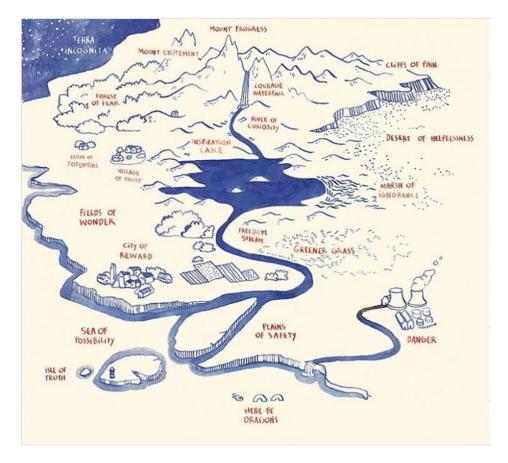
What is emerging: A stronger need/ desire for transparency and increased communication between people that deliver training. Flexibility in training options.



#### International perspectives (RDA, CODATA etc)

- RDA/ CODATA Summer School for Research Data Science
  - Focus on low and middle income countries (Pretoria 2020)
  - Developed generic curriculum, using open source materials
- Research Data Alliance
  - Interest Groups and Working Groups, facilitating international networks and collaboration
  - RDA Plenary 15: Melbourne, 18 to 20 March!
- FORCE11 Scholarly Communications Institute, UCLA, August
- OECD Global Science Forum Expert Group on Digital Skills for Data-Intensive Science





How do we turn these clusters into pathways?

Mapping skills?

What are the characteristics of a skills map? Who is it for?

Map: @amandinethomas (from instagram)

ALL ABOARD

Irish Digital Skills
Framework 'All Aboard'

From ASCILITE Technology
Enhanced Learning Blog



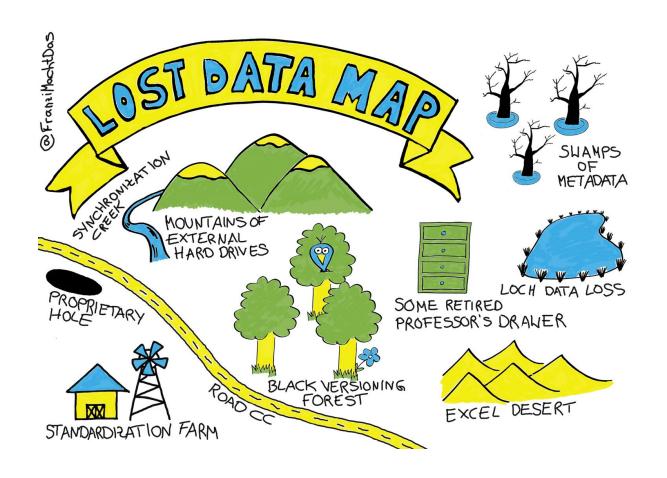


What are skills?

What are competencies?

How do they interact?

Data Skills framework, Open Data Institute



Franziska Helbing @FranziMachtDas

Capturing Takeaways:

https://tinyurl.com/NZtrainingBoF

