Ensuring a data Savvy workforce

Short/informal data skills opportunities

- **23 (research data) Things**
  - running throughout 2016, with currently over 1,500 people taking part in Australia and overseas
  - activities and resources will be available for reuse into the future
  - DIY or for workplace groups, flexible approach (do all 23, cherry pick etc)
  - activity based online modules covering the key issues in data management and connection - 3 levels of difficulty, mix of video, reading, hands-on activities, with discussion starter questions
  - ANDS can support groups wishing to run 23T short Crash Courses or extended courses to raise staff capabilities in Research data management: contact@ands.org.au

- The Carpentries: newly emergent, community developed and led, small group training sessions focusing on extending and applying tech skills to data:
  - **Data Carpentry:** 3 day ResBaz intensives in February each year around Australia
  - **Library Carpentry:** over 15 courses offered in Australia in the past year
  - **Software Carpentry:** increasingly part of Higher Degree Research skills training
  - **Author Carpentry:** (new) - skills in publishing in an online and data connected world

- DIY Online short courses in RDM:
  - **University of Melbourne MANTRA** (adapted from UK)

Formal courses

Currently approximately 65 postgraduate courses are being offered by Australian universities, in both mixed modal (online and in person) and also entirely online

- Mostly Post graduate level: either as Masters or Graduate Certificate
- Courses are offered within Computing, Information Science/Management, Management, and within discipline specialities

**Example: Graduate Certificate and Masters Specialisation in Data Management (GCDM)**
Offered from 2017 through the School of Information Studies at Charles Sturt University. GCDM is part time over one year (two subjects per session) and completely online. Completion provides evidence for practicing information professionals or researchers of having studied the fundamental principles, key concepts, tools, standards, and techniques of data curation and data management.

Data Savvy kids

The Australian National Curriculum has multiple references to students collecting, analysing and visualising data within several subject areas, and across most grade levels - creating our data-savvy workforce of the very near future.

**Example: ICT General Competencies**
Students develop capability in using ICT (Information and Communication Technologies) for tasks associated with information access and management, information creation and presentation, problem-solving, decision-making, communication, creative expression and empirical reasoning. This includes conducting research, creating multimedia information products, analysing data, designing solutions to problems, controlling processes and devices, and supporting computation while working independently and in collaboration with others.