Identifying Skill Sets for Repository Staff
Comparative survey: 2011 & 2017
CAUL Repository Event, 29 October 2018

Would you say that you are extremely satisfied, mostly satisfied, neither satisfied nor dissatisfied, mostly dissatisfied, extremely dissatisfied, or dumb penguin?

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About the survey

Purpose: to identify the skill sets required to work on a digital repository in Australia and New Zealand

Time period: run over 3 weeks:, November to December 2011 & then again in 2017.

Participation: CAIRSS e-list

Motivation: results could be used to better inform the community and assist member institutions in the recruitment and training of repository staff.

Structure: Divided into five sections:

1. About the repository
2. About your repository job
3. Training
4. Job skills and knowledge
5. Trends in repository skills & knowledge

2011 survey outputs & outcomes

- Presented the findings at the 2012 CAUL repository community event
- Comprehensive report delivered to CAUL
- Article: Simons, N. & Richardson, J., (2012). New Roles, New Responsibilities: Examining Training Needs of Repository Staff. *Journal of Librarianship and Scholarly Communication* 1(2), p.eP1051. DOI: http://doi.org/10.7710/2162-3309.1051
- Dataset: Simons, N. & Richardson, J. (2012). Identifying skill sets for repository staff [data file and survey questions]. South Brisbane, Australia: Griffith University Data Registry. Retrieved from http://dx.doi.org/10.4225/01/503C303E9B551
- Impact: Bepress quote our survey as being an inspiration for the development of their repository manager certification course

Survey participation

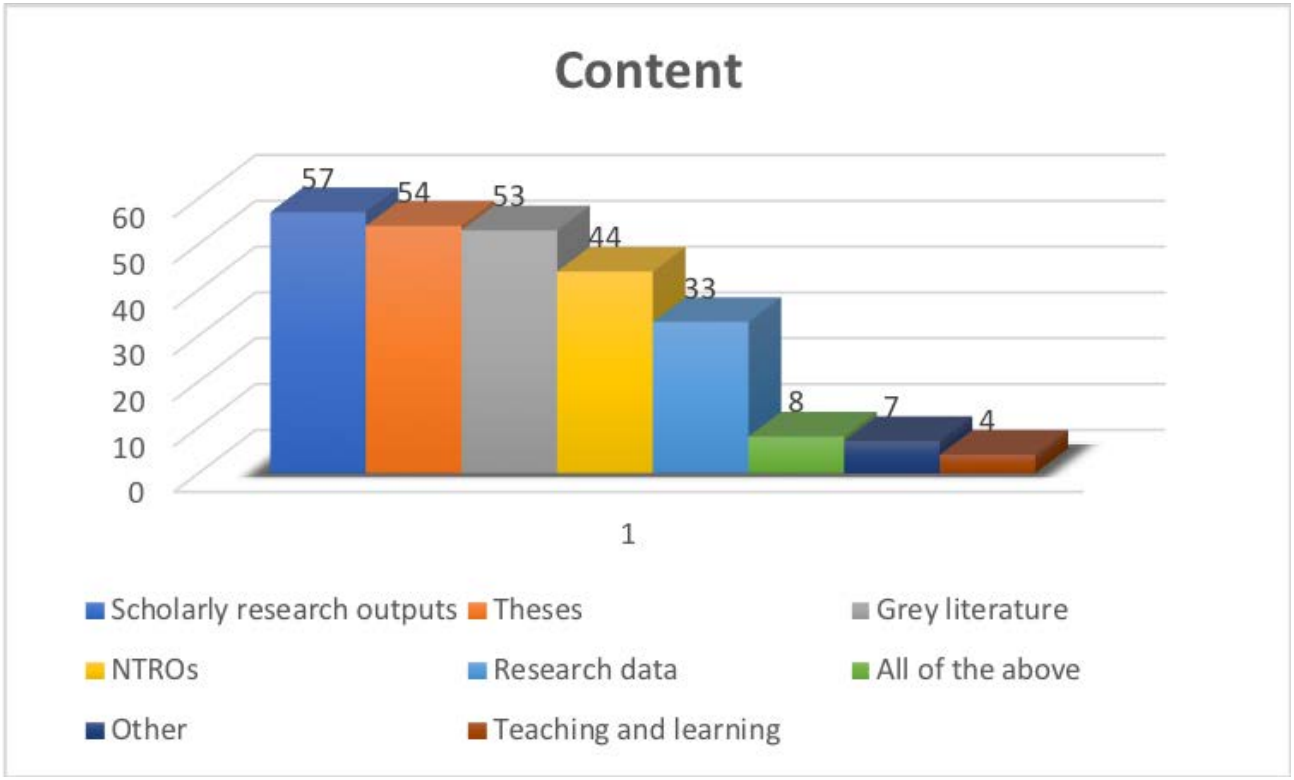
2011

CAIRSS Google Group: 228		
Response rate: 85 (37%)	Australia: 86%	NZ: 14%
Ethics approval:	INS/01/11/HREC	

2017

CAIRSS Google Group: 348		
Q = S2Q1 Response rate: 79 [p.1]	Australia: 58%	NZ: 4 6.45%
Ethics approval:	GU Ref. No. 2017/738	

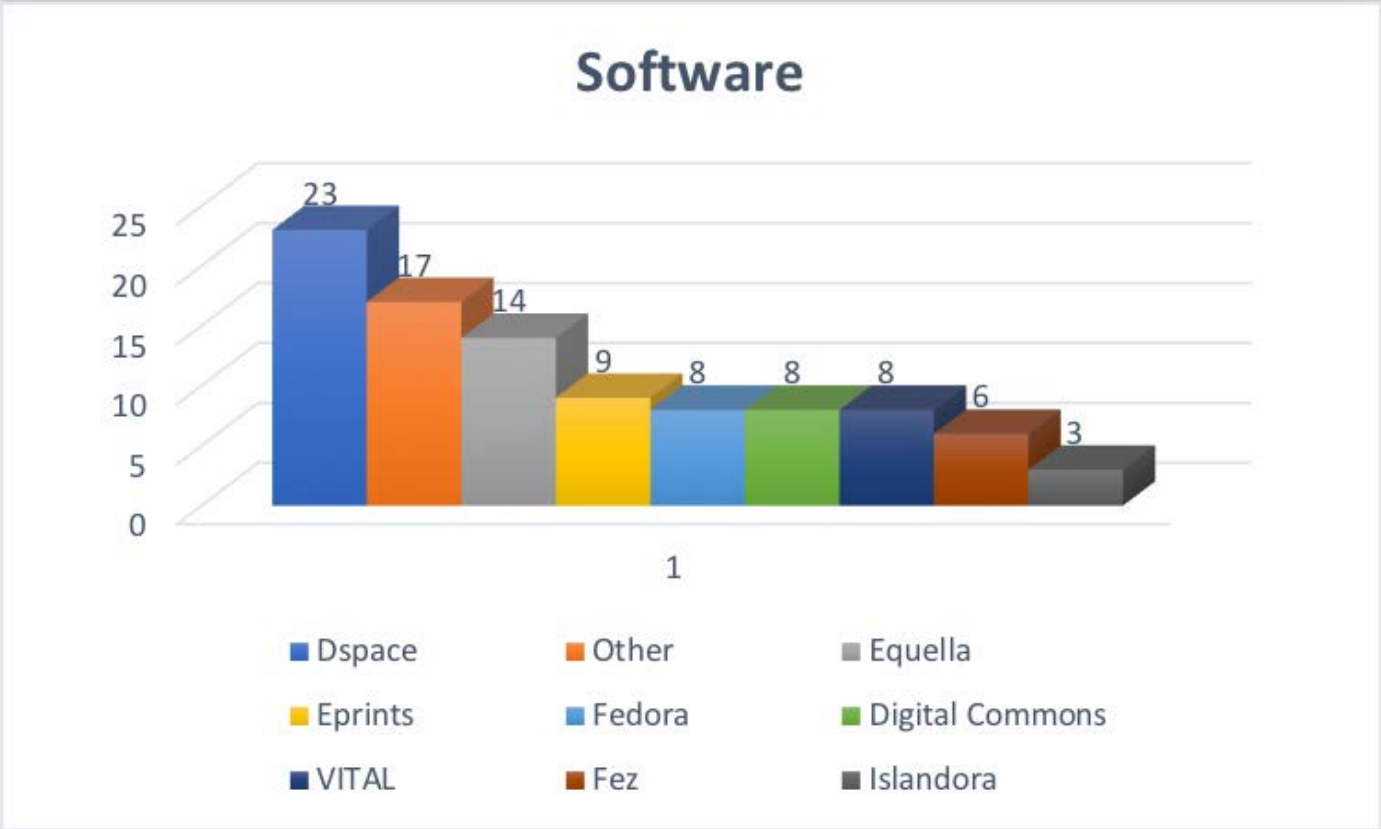
Section One: About the Repository - Content*



Trend: Top content type remained the same 2011 to 2017. Modest rise in research data content. More granular answer types shows grey lit and NTROs are a big component of repository content types.

**more than one answer could be selected*

Section One: About the Repository - Software*

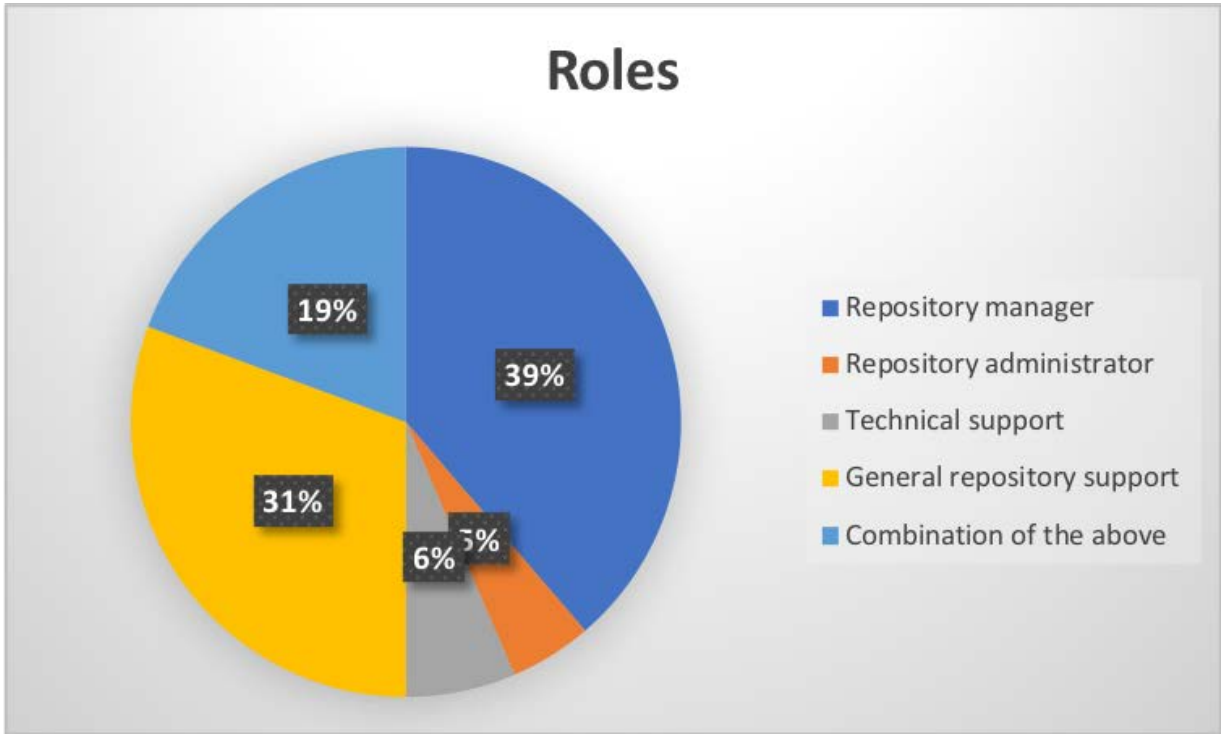


Trend: Top 3 remained the same in 2017 as for 2011. However, more diversity of repository software types.

'other' examples incl. PURE, Figshare, ReDBox, Primo and more.

**more than one answer could be selected*

Section Two: About Your Repository Job - Roles **2017**



Trend:

Largest combined category in 2017:

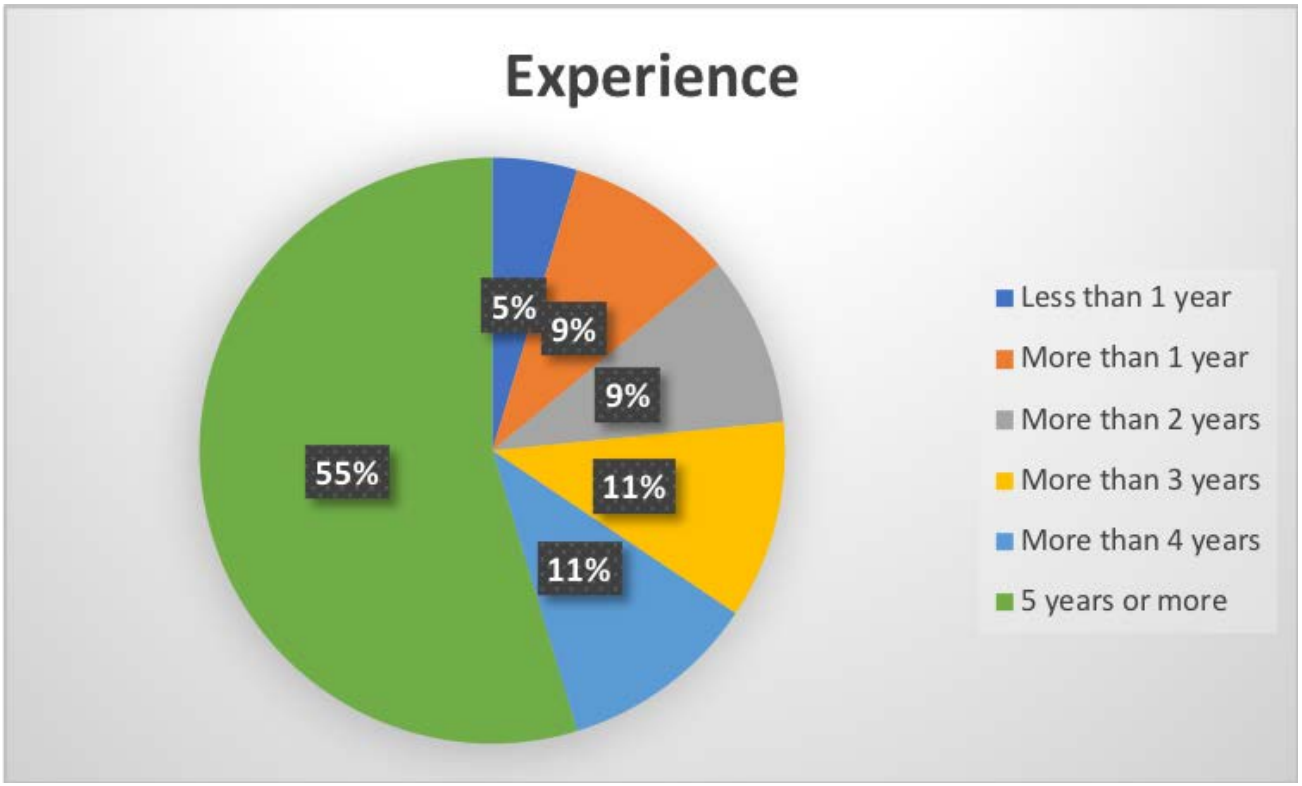
Repository manager and general repository support = 70%

Largest combined category in 2011:

Repository manager and administrator = 56%

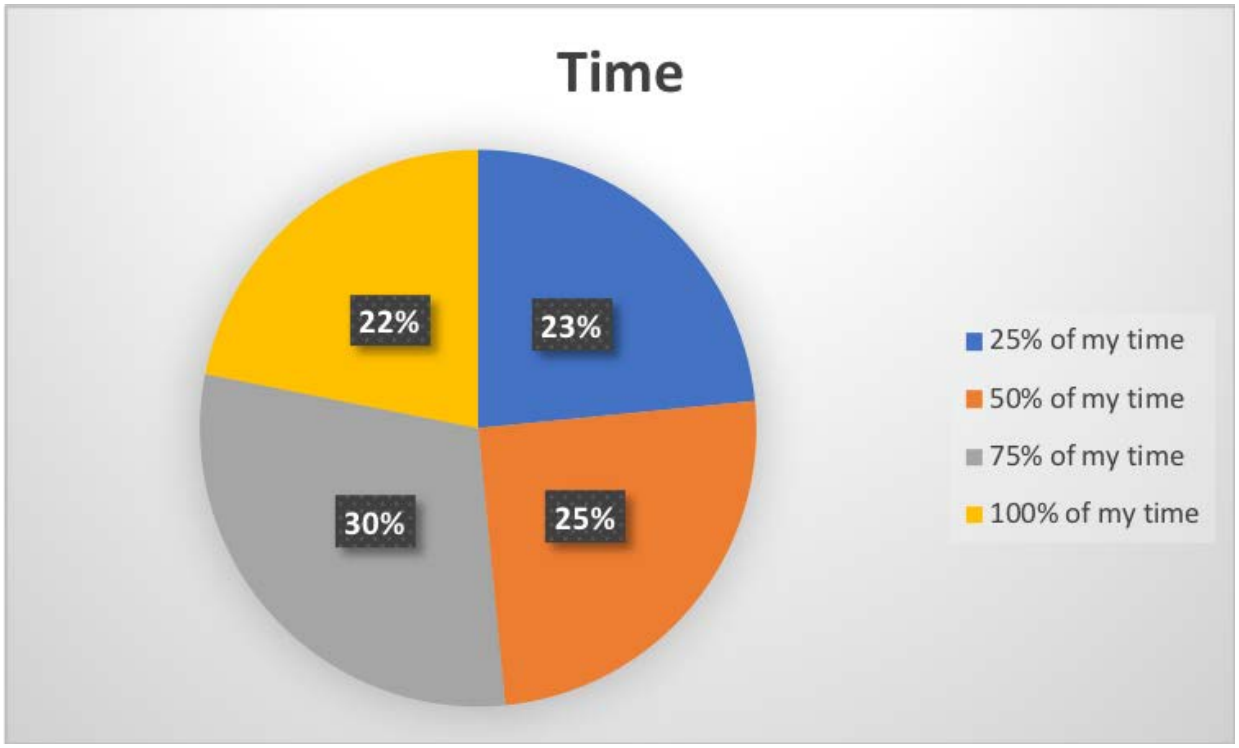
Comments reflect a broadening of roles e.g. as OA advocates, trainers

Section Two: About Your Repository Job - Experience



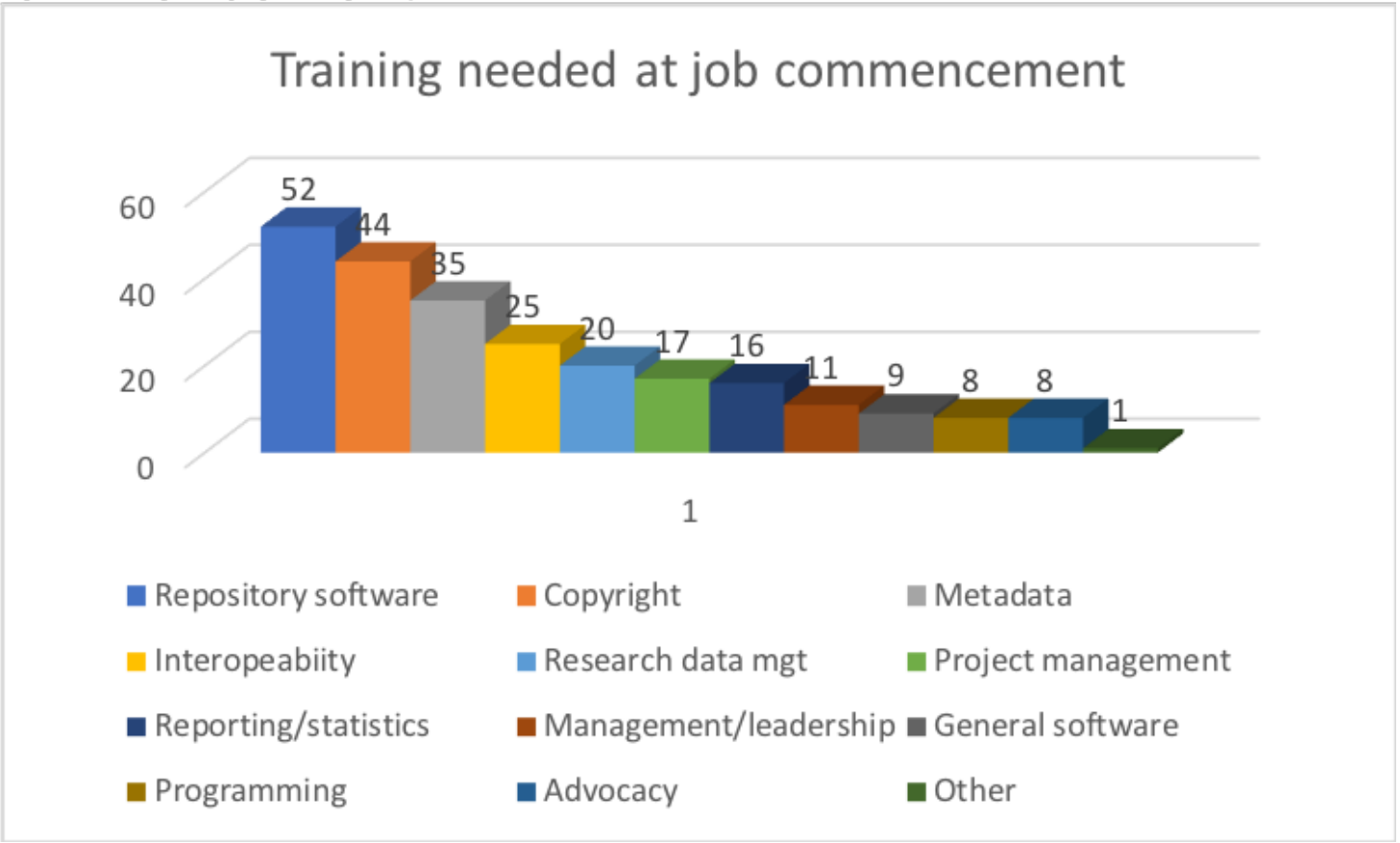
Trend: a lot of experienced staff! Largest combined category 2017 is 4&5+ years (66%) up from 2011 which was 47%

Section Two: About Your Repository Job - Time



Trend: Roles are even less devoted solely to repository work! Large drop in spending 100% of role on repository (47% in 2011 to 22% in 2017). Increase in 75% and 50% of time.

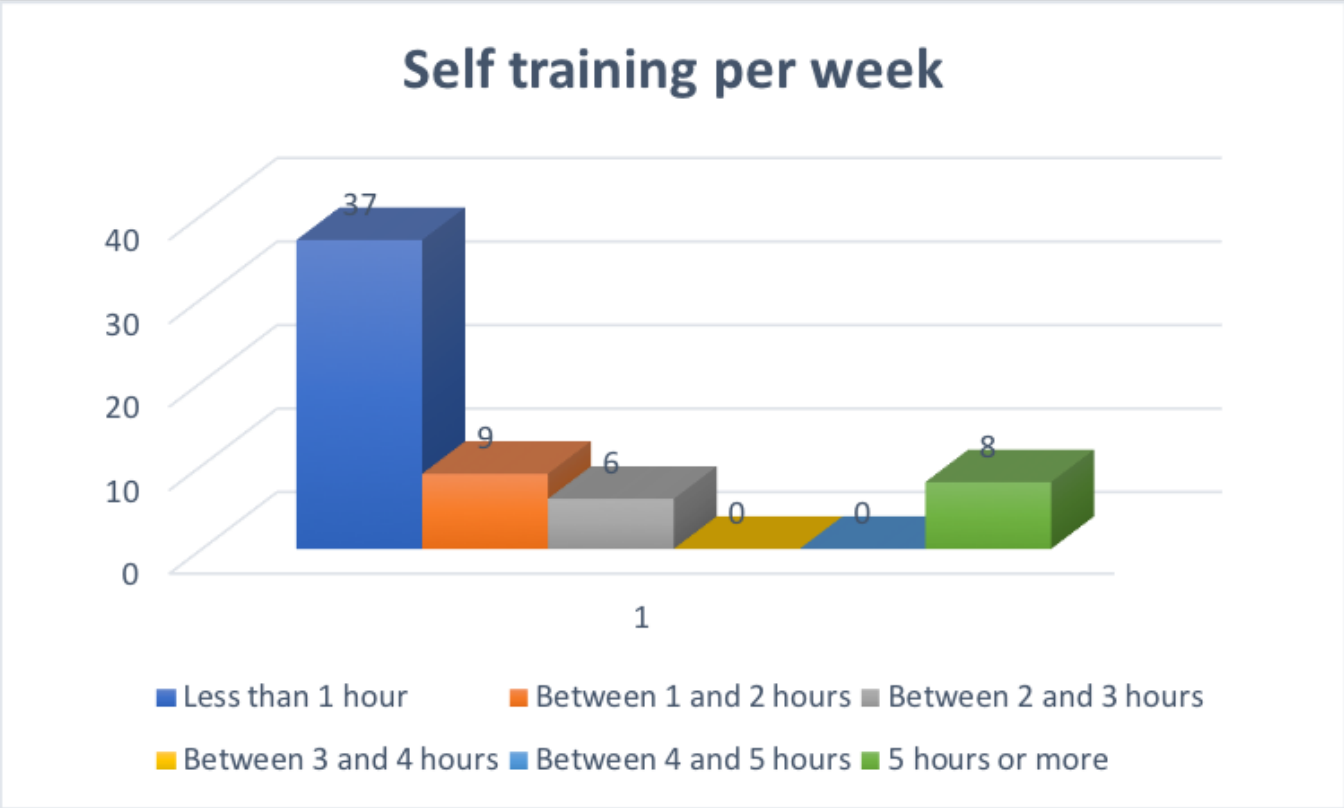
Section Three: Training - Required at Commencement*



Trend: No significant difference 2011 to 2017

**more than one answer could be selected*

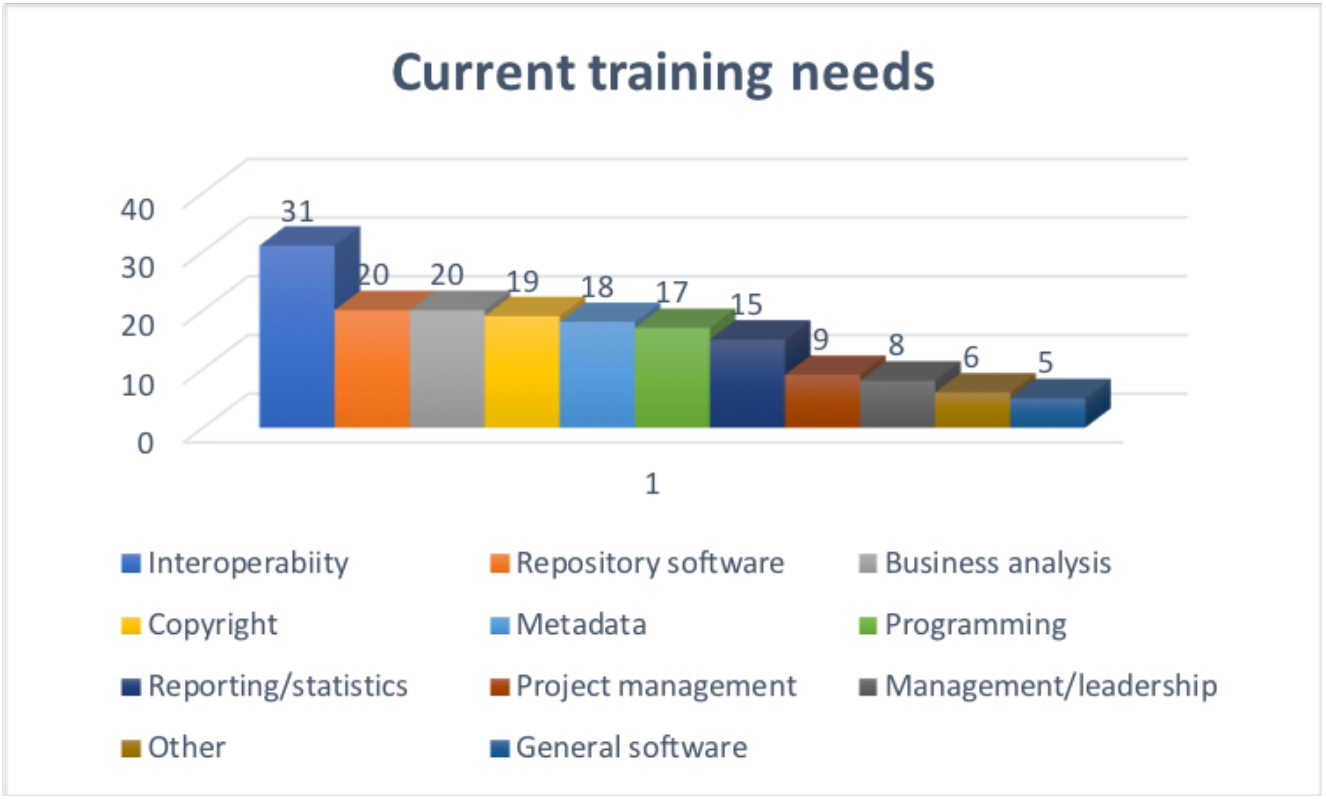
Section Three: Training - Time on self training



Trend: Small but significant shift from spending 0-2 hours to spending 0-1 hour per week and more at the 5+ hours end in 2017

**more than one answer could be selected*

Section Three: Training – Current Requirements



Trend: Significant changes 2011 to 2017. Interop from 3rd to a clear 1st. Repo software from 6th to 2nd. Business analysis as a new category came in 3rd. Need for copyright dropped slightly and project management dropped significantly.
**more than one answer could be selected*

Section four: job skills and knowledge

Importance of specified knowledge sets

Top rated as ‘very important’:

1. Repository software
2. Copyright

Trend: in 2011 the top four were:

1. Copyright
2. Metadata quality
3. Open access issues
4. Government reporting

When combining ‘very important’ and ‘quite important’ the top rated were:

1. Repository software
2. Knowledge of the scholarly environment
3. Copyright
4. Knowledge of the digital repository environment
5. Govt reporting
6. Research Data Management
7. Interoperability
8. Open access issues

All of the above were highly rated skill and knowledge sets required for repository staff.

Section four: job skills and knowledge

Use of technical skills - top answers

Trend: largely unchanged from 2011

Regularly

- Communicate technical issues
- Liaise with IT support
- Liaise with clients

Sometimes

- Evaluate repository software
- Develop repository services
- Design/develop interface and tools
- Analyse/problem solve

Never

- Patches/bug fixes
- Perform software upgrades
- Manage feed to third party providers
- Customise the repository
- Liaise with software vendors

Section four: job skills and knowledge

Use of collection management skills – top answers

Regularly + almost always

- Liaise with clients
- Monitor metadata quality
- Manage copyright issues
- Use reporting tools

Sometimes

- Select file formats
- Use statistical analysis tools
- Select/use metadata sets

Never

- Liaise with software vendors

Trend: in 2011 the top four were:

1. Copyright
2. Metadata quality
3. Liaise with clients
4. Use metadata sets

Section four: job skills and knowledge

Use of management skills - top answers

Almost always

- Lead and manage staff
- Engage in strategic planning

Regularly

- Promote the repository internally
- Develop and monitor workflows
- Ensure copyright issues are resolved

Sometimes

- Plan to develop repository collection
- Liaise one-on-one with internal clients
- Evaluate repository performance

Never

- Manage the repository budget
- Negotiate with software vendors
- Ensure govt reporting requirements are met
- Promote the repository externally

Note: Develop repo advocacy program - Never and regularly equally tied –

Trend: in 2011 the top four were:

1. Lead and manage staff
2. Plan to develop repository collection
3. Evaluate repository performance
4. Engage in strategic planning

Section four: job skills and knowledge

The top 5 metadata standards and exchange protocols in use

Metadata schema / exchange protocol	Percentage of responses
Dublin Core	88%
OAI-PMH	64%
RIF-CS	36%
MARC	32%
Local customised metadata	19%

Trend: DC up 20%, OAI-PMH up 18%, RIF-CS up 20% and now ahead of MARC, MARC down 8%, local up 3%

Section four: job skills and knowledge

Research Data Management (no specific section on this in 2011 survey)

Are you involved in managing data in your repository?
No – 50%
Yes – 49%

Top data management skills and knowledge used in current job:
Rights, IP, copyright
- tied with –

Metadata and crosswalks
Then data citation, advocacy and ethics/sensitive data management

What data management skills and knowledge would you like to develop further:
- All of the above

Training activities undertaken by participants:
- ANDS 23 Things program – 64%
- Library, data or software carpentry – 22%

Note: university course was 0%

Section five: trends in skills and knowledge

Most challenging aspects of repository work **2011**

Section five: trends in skills and knowledge

Most challenging aspects of repository work **2017**

Trend: from reporting and copyright to more diversity of problems including time (lack of), management, strategic alignment and support of repository, open access advocacy, keeping up to date with repository trends

Section five: trends in skills and knowledge

Most challenging aspects of repository work

"In the past ten years, research at our institution has grown significantly, yet the repository team staffing level has remained the same."

"Managing workflows and staff to eliminate the publications backlog; open access advocacy; reviewing current software; implementing a next generation repository"

"Working in an environment where there has been little direction and limited recognition/support on an institutional level."

"Keeping abreast of developments; finding time to fully consider enhancements and the resources to achieve these."

Section five: trends in skills and knowledge

New skills and knowledge developed over the past year **2011**

Section five: trends in skills and knowledge

New skills and knowledge developed over the past year **2017**

Trend: from open access, research data and copyright to research data and metadata with repository + time + project management, repository software and identifiers

Section five: trends in skills and knowledge

Additional skills or knowledge: anticipated areas of need **2011**

Section five: trends in skills and knowledge

Additional skills or knowledge: anticipated areas of need **2017**

Trend: from linked data, time management and data management to technical skills (esp.. interoperability, software, migrating platforms, APIs), data and advocacy

Further comments

"One of the most important ways of building skills and gaining knowledge is to be involved in communities of practice such as CAIRSS. This community is one of the most important things that CAUL has supported in recent years...."

Implications for practice 2011

- Working on a digital repository requires a specific set of job skills and knowledge that is largely acquired through informal training rather than through formal training courses or academic curriculum.

- As an emerging and evolving profession, repository staff would benefit from tailored training at the commencement of a position in addition to ongoing training and skills development.

- The specific set of job skills and knowledge sets required to work on a digital repository has implications for staff recruitment, development, training, and retention strategies.

Implications for practice 2017

In addition to those mentioned in 2011 (which still hold true):

- Most repository staff have been in the job for 4+ years. Therefore changes to library school curriculum will have little effect on upskilling. Instead, courses or workshops need to be provided for those in the current roles.

- Interoperability, repository software and business analysis featured as the top categories survey participants wanted training in. However, they largely do not have technical roles and so do not manage third party repository feeds (e.g. to Trove) and do not make changes to software. Does this reflect an area they would like to move into? Frustration at wanting to make technical changes and not having the know-how to do it?

- Repository staff have even less time to spend on the repository than they did in 2011 and do not spend as much time in self training. Why?

Further information

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