Digital Curation and Doctoral Research: Current Practice

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Aims of research project

Expectation from funders and institutions that doctoral supervisors include digital curation in research skills supervision/guidance

• Can supervisors fulfil this expectation?

• Is it a reasonable expectation?

• How can digital curation support be improved within the doctoral student/supervisor relationship?
Survey of doctoral students and PhD holders

• N=116
• Completion rate c.75%
• Roughly equal split between
  • Early students
  • Late students
  • Doctorate holders who supervise
  • Doctorate holders who do not supervise
• Slight disciplinary bias towards Arts subjects
Good news!

- 90% believe digital curation to be moderately to extremely important
Bad news!

- 60% of PhD holders and 80% of students report little or no expertise
- Overall, 74% know little or nothing about digital curation
Digital curation activity within PhDs

Type and frequency of digital curation activities for doctoral students

- Create data as documentation or representations of your research
- Create 'born digital' data
- Receive data from another source
- Create descriptions or metadata for your datasets/digital outputs
- Dispose of or delete some of your data
- Deposit data in a managed repository or digital archive
- Perform technical preservation actions on data
- Use, query, or analyse data
- Backup your data to an external source

Legend:
- Daily or several times per week
- Weekly
- Monthly or several times per year
- Yearly
- Once only in the course of the PhD
- This activity is applicable to my research but I never do it
- Not applicable to my research
Digital curation activity within PhDs

<table>
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<th>Activity</th>
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Backup practice generally good
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Area for concern
Summary of digital curation activity

• Despite low levels of expertise, students are engaging in digital curation activities (at various points on curation lifecycle)

• Respondents show awareness that some tasks are necessary but are not doing them

• Respondents may be undertaking some tasks without the necessary skills, with implications for
  • Data quality
  • Student effort
  • Chance of completion of PhD
Perceptions of responsibility

My prediction?
Perceptions of responsibility

My prediction?

“It’s someone else’s job”
Perceptions of responsibility

The reality:

Individual responses showing division of responsibility during doctoral study

Responder role
Early student
Late student
PhD Holder
Supervisor

○ = during study
x = after study
Perceptions of responsibility

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Perceptions of responsibility

The reality:
• tight cluster (A) shows that c.75% believe curation responsibility lies almost entirely with the student
• Remainder mostly within cluster B
• Most student responses fall into cluster A

Individual responses showing division of responsibility during doctoral study

Responder role
- Early student
- Late student
- PhD Holder
- Supervisor

o = during study
x = after study
Perceptions of responsibility

The reality:

Individual responses showing division of responsibility after doctoral study

- **Responder role**
  - Early student
  - Late student
  - PhD Holder
  - Supervisor

○ = during study
x  = after study
Perceptions of responsibility

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The reality:

- Much wider spread of responses
- Tight cluster (D) shows that c.60% believe curation responsibility remains almost entirely with the student
- Tight cluster (C) shows alternate viewpoint (c.30% of respondents) giving institution most responsibility
Perceptions of responsibility

The reality:
**During** the doctorate
- Students assign >80% responsibility to themselves
- Supervisors assign more of the responsibility to themselves than students do
- Institutions considered to have a very low responsibility by all
Perceptions of responsibility

The reality:
**After** the doctorate
• Much wider spread of responses
• Responsibility generally thought to remain with the student
• Supervisors’ role diminishes
• Role for institution in one clear respondent group
Perceptions of responsibility

The reality:

“It’s my job”
Awareness and use of digital curation support

- Low general awareness and use of external sources
- Much higher awareness and use of local sources
- Awareness and use correlates with ‘distance’ from student/supervisor
- Backup is an embedded service
Summary

BOTH students and supervisors think:
- Digital curation is important
- It’s my job
- BUT I don’t know how to do it

- Understanding of the digital curation lifecycle and risks to PhD completion likely to improve engagement
- Using sources of support likely to reduce pressure on individuals (but evidence to suggest bottom-up approach might work better than top-down due to ‘nearness’)
- Supervisors are an excellent liaison to doctoral students – but they need more support for digital curation
- Can we learn from activities that are already embedded?