

Digital preservation training needs assessment toolkit: a collaborative development for skills auditing

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ABSTRACT

This poster is about one of the deliverables of the Polonsky Foundation-funded Digital Preservation at Oxford and Cambridge Project (DPOC), which is to assess the digital preservation skills and training needs within each institution's workforce. During the review process of existing digital preservation skills and competencies it was found that there was no auditing template to use or adapt; as a result, the DigCurV competencies were reviewed and adapted into a toolkit to enable each institution to measure digital preservation knowledge and skill sets. For the DPOC Project, the results from the completed elements of the toolkit would enable the Fellows to identify potential skill and knowledge gaps in order to develop in-house curricula. For the wider community, the toolkit is intended as a resource for developing digital curation and preservation training programmes.

KEYWORDS

digital stewardship, digital preservation, digital curation, workforce development, skills, training, literature review

1 INTRODUCTION

The DPOC Project is a collaborative two-year project between Bodleian Libraries (University of Oxford) and Cambridge University Library (University of Cambridge), which commenced in August 2016 and is funded by the Polonsky Foundation. The project aims to enhance each institutions' digital preservation programmes by building on existing expertise and research in the field of digital preservation and curation, forging closer links between key digital preservation and curation advocates to preserve each institution's digital assets for the researchers of the future. Each institution has three digital preservation Fellows, focusing upon:

- (1) policy and planning development and implementation,
- (2) the development of expertise, training and community outreach, and
- (3) the specification and implementation of technical tools and workflows for digital preservation activities.

As local teams, the Fellows address and support their institutions' specific digital preservation needs. Activities include auditing current provision, reviewing current good practice and recommending enhancements that might be made to improve the local digital preservation infrastructure (including policy framework, provision of people and skills, and technical infrastructure). The Fellows work collectively as a larger team, while each Fellow works closely with their partner at Oxford or Cambridge ensuring collaboration, enabling an exchange of knowledge between organisations and facilitating shared solutions if these emerge. Fellows are also required

to share knowledge to the wider digital preservation community [4].

2 IDENTIFYING AND NARROWING A RESOURCE GAP

At the outset of the project the Outreach and Training Fellows worked collaboratively to develop materials to meet their specific project requirement of carrying out an audit of staff skills with regard to digital preservation. Whilst it was clear that there were existing methodologies from the risk and auditing perspectives within digital preservation (including, but not limited to, DRAMBORA, DSA, TRAC) there did not seem to be a methodology or resource available for auditing personal skills and training needs. With no widely available toolkits to use to measure the maturity levels of staff awareness, understanding or skills related to digital preservation, a deeper literature review was carried out.

2.1 Skills framework and competencies review

Whilst there was an apparent lack of skills audit methodologies, there are many high-level skills frameworks for digital preservation and curation. The DigCurV framework lists skills aimed specifically at executives, managers and practitioners whilst the DigCCurr matrix details skills and competencies for digital curation curriculum development [8, 9]. Several reports, such as those produced by the CLIR and NRC have been recently released in the United States discussing skills required in the fields of digital curation and data curation [2, 10]. The skills and competency work of the NDSR has moved towards a greater understanding of the skills required by 'digital stewards' and the training methodologies to inculcate such expertise [5].

2.2 Adapting frameworks

While conducting the skills framework and competency review, a training needs assessment was developed using the digital preservation skills frameworks and also traditional ones provided by the ARA and CILIP [3, 6]. Skills from each framework were mapped to each other, shared skills were combined and those that lacked clarity were eliminated. The skills were also mapped to current training programmes at each institution and, where overlaps existed, were removed. The remaining skills were carefully assessed in a literature review before interview questions were drafted. The target interviewees for the initial test of the assessment criteria were practitioners and managers working with respective institutional research repositories. A simplified version of the questions were drafted for an organisation-wide online questionnaire.

3 TRAINING NEEDS ASSESSMENT TOOLKIT

3.1 Developing the toolkit

Individual interviews were conducted at each institution to gather the required information and the resulting data analysed using DigCurV skill descriptors through qualitative and mixed methods. The analysis from the training needs assessment informed the Fellows of current skill gaps and training needs; those skills, when mapped to the OAIS Reference Model, will also highlight potential gaps in workflows, which can then be addressed [1]. The approach in using a unified template would also highlight any flaws or differences in the developed interview questions between the institutions. This would help develop a template that could be reused at other institutions.

3.2 Prototype toolkit

The poster describes a prototype digital preservation training needs assessment toolkit, which practitioners can use when assessing their own organisations' skills, capabilities and training requirements. The toolkit provides questions that the practitioner can feed into an online survey program to send out to institutional staff. Bodleian Libraries used the SurveyMonkey tool and Cambridge University Library used the Qualtrics tool as both had existing institutional accounts. Both institutions were able to use quantitative and qualitative data for comparison despite using two different tools. The toolkit provides face-to-face interview questions and a methodology, which is lacking in other methods and frameworks. Bodleian Libraries used the interview questions in a printed format and developed separate question response form templates for recording answers. Cambridge University Library also used the interview questions in a printed format but recorded their interviews and then transcribed the results into Qualtrics for analysis, having preloaded the questions into the Qualtrics module. To summarise, the toolkit consists of:

- (1) an organisation-wide digital preservation skills survey questionnaire,
- (2) practitioner lens semi-structured interview template,
- (3) manager lens semi-structured interview template,
- (4) manager and practitioner combined semi-structured interview template,
- (5) developer semi-structured interview template, and
- (6) supporting documentation for the surveys and interviews.

4 DPC REVIEW

Whilst the toolkit has been developed and tested within Bodleian Libraries and Cambridge University Library with differing methodologies, the toolkit will also be reviewed by the Digital Preservation Coalition (DPC) to determine its usefulness for the wider digital preservation community. It is hoped that the toolkit will be tested at a variety of DPC member institutions and organisations, which cover the academic, business, charity, cultural, heritage and not-for-profit sectors [7]. As a result of this planned review and further consultation, the toolkit will have been rigorously tested in practice so that it can be universally applicable to as many organisations as possible that wish to develop staff capability and training resources in order to preserve their digital assets.

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