

Designing a toolkit to support the development of copyright literacy

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The Open Education Licensing (OEL) project team surveyed teaching and other staff in the Australian higher education sector. The surveys informed the design of a Toolkit web application, which would provide tailored information to users by presenting relevant questions and guidance in a decision tree format.

The decision tree provides pathways to guidance regarding the licensing of teaching resources for Australian higher education. The software was developed iteratively, allowing subject matter experts (SME) to feed in their content whilst the data system and interface were designed and implemented. A user-centred methodology was employed to maximise usability. The Toolkit used open source technologies and is itself openly licensed.

This poster communicates the process of design, development and testing of the Toolkit web application. The lessons learned through this process may help inform the design of other innovative systems that aim to emulate the support provided by SME.

Keywords: OER OEP toolkit copyright literacy user-centred usability decision-tree web-application software

Problem

Copyright literacy is defined as “acquiring and demonstrating the appropriate knowledge, skills and behaviours to enable the ethical creation and use of copyright material,” (UK Copyright Literacy, n.d.). One challenge regarding the effective application of Open Educational Practices (OEP) in Australia is academics’ perceived lack of understanding of copyright and licensing (Bossu, Brown, & Bull, 2014). The Open Education Licensing project team surveyed 166 teaching and other staff from 35 Australian universities to identify these gaps in understanding. The survey revealed that 65% of respondents considered OEP to be an important or somewhat important part of their institutions’ activities while 70% indicated that their institutions currently offered some free educational content, and 43% of respondents revealed that their institution did not have strategic plans that included Open Educational Resources (OER) or OEP (Wright, Bossu, Padgett & Whitehead, 2016). This suggests that there are impediments to accessing relevant supporting resources in the context of higher education in Australia.

Solution

The surveys informed the design of a Toolkit web application. The development team determined that the most appropriate format for a copyright and licensing Toolkit was a decision tree, whereby users could follow a path of questions to guidance determined by their responses. This contextual guidance provides links to openly available support resources to assist copyright officers, academics and librarians. The project team mapped the survey data with the questions and answer options, and defined the pathways to the guidance.

As an example, a particular case might involve a user who is seeking general information about using an existing resource but does not have any specific questions in mind. Using the Toolkit, the user indicates that they will use this resource in the course of their employment at the University of Tasmania. This generates guidance about intellectual property and copyright ownership at the university, with links to relevant information, including policies on the university's website. The user then indicates that the resource is already licensed under a Creative Commons BY no derivatives licence (CC BY-ND), and this generates guidance about that licence with links to relevant information. The user then indicates that they do not intend to change the resource. This triggers guidance about moral rights, and avoids presenting irrelevant guidance about modifying the resource and potential licence conflicts. The user finishes by indicating that the resource will be shared on YouTube. Guidance is available about the use of YouTube, including a link to terms of use and a recommendation that the user consults their institution's Copyright Officer. As the user provides each answer, the guidance snippet(s) can be previewed. On completion of the pathway, all guidance snippets are available within a 'Guidance Summary', which can be exported to save or print for future reference.

Design and development

Content

The decision tree was modelled using a flowchart diagram. The data for describing the questions and answers in the flowchart were then modelled in a way appropriate for storing in a relational database. This process of structuring the data – the normalisation process – is required so that the data may be flexibly used. By defining how each piece of data is related to each other (e.g. which questions have which answer options), the development team could eliminate duplications and query the data in many ways.

System

The team developed an innovative approach to managing the ongoing refinement of the decision tree content separate from the development of the user interface. The team provided a spreadsheet to subject matter experts (SME) for creating or modifying the questions, answers and guidance content. By enabling the concurrent development of both content and system, the project timeline could be abbreviated.

The user interface was designed first by producing wireframes, which specified the general layout of the decision tree page elements without concerning styling, such as colour and typography. Design decisions at this stage focused on presenting users with one question per view, and enabling the user to navigate back and forth through their pathway. Prototyping the intended design in this quick and easily changed format had a number of benefits: it enabled feedback early in the design, and initiated early production of content, data systems, and visual design. The wireframes allowed design decisions to be made before any implementation effort.

The wireframe design demonstrated that the decision tree can lead users only to those materials that are relevant when relevant. Once the core functionality and layout was established, wireframes were followed with mockups to design the visual elements. These graphical elements were then implemented in the web application to enhance the usability, navigability and recognisability of the web application.

The development process followed a user-centred methodology. A set of functions and features were chosen to release after each development iteration. The latest version was tested at workshops, where participants – who had never before seen the application – were asked to achieve set goals without explicit instructions. Their interactions with the application were observed, and their opinions and commentary noted either informally or with surveys. The feedback was analysed by the development team, and solutions to the problems were implemented in subsequent iterations. Accessibility, too, was a central focus in the design of the interface, and the site is designed to meet WCAG 2.0 AA guidelines.

The Toolkit was developed with open principles in mind. It was implemented using open source technologies (e.g. PHP and MySQL), and the Toolkit software itself is openly licensed so that it can be reused and adapted. Many of the materials linked to within the guidance are existing OER, saving effort in re-creating content.

The result

The Toolkit will be publically available on the project website. With the software licensed with an open source licence, the Toolkit can be reused and adapted to solve similar problems in other domains, rather than singularly the domain of copyright literacy. For example, this decision tree system could be used to support students with their administrative queries so that they know which department can attend to their concern, or the system might be applied to the troubleshooting of technical problems for users of particular software or hardware.

References

- Bossu, C., Brown, M., & Bull, D. (2014). *Adoption, use and management of Open Educational Resources to enhance teaching and learning in Australia*. Retrieved from http://www.olt.gov.au/system/files/resources/CG10_1687_Bossu_Report_2014.pdf
- UK Copyright Literacy. (n.d.). *Home*. <https://copyrightliteracy.org/> [viewed 5 Oct 2016].
- Wright, R., Bossu, C., Padgett, L., & Whitehead, D. (2016). *Open Education Licensing: Copyright tools for education in the 21st century*. Poster presented at Higher Education Research and Development Society of Australasia Inc. – The shape of higher education, Fremantle, Australia, 4-7 July 2016.

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