

Best Practice in Online Content Curation In Higher Education

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Introduction:

Online content curation is the process of selecting, reviewing, and organising resources available on the web for a particular audience [1]. It is much like putting together a reading list, but with the benefit of attaching a review of, and/or commentary on, the resources you are recommending. Many platforms also have the facility for readers to add comments, for sharing the resources via social media or virtual learning environments (VLEs), and for developing a personal learning network (PLN) by following other curators and others able to follow your work.

If you are new to content curation, we suggest you view our introductory videos:

[What is Online Content Curation?](#)

[Getting Started with Online Curation](#)

We have also produced a technology review of some of the platforms we have used for online curation within Cardiff University, to help you select an appropriate platform. Case studies are also available on the Learning Hub and we have previously reported on our experience using these platforms to support small group learning [2].

This Best Practice document aims to provide advice on how to get the most from using a curation platform, and indeed identifying whether a curation platform is right for the job you have in mind. We present this as a series of key considerations with a discussion and, where appropriate, examples from our practice.

In summary, our recommendations are (with hyperlinks to the relevant sections):

1. [Define the job you need to do](#)
2. [Select an appropriate curation platform](#)
3. [Select appropriate, high quality, resources](#)
4. [Provide a commentary](#)
5. [Organise your resources](#)
6. [Collaborate where possible](#)
7. [Develop an online Personal Learning Network](#)
8. [Develop your curation workflow](#)
9. [Back up your curated topics](#)
10. [Enjoy!](#)

1. Define the job you need to do

This is the most important consideration with content curation – define carefully what it is you wish to do first. Christensen’s theory of “jobs-to-be-done” is useful here, as it focusses attention on the core issue of what your audience (or “customers”) require [3]. Be as specific as you can. In higher education, this will usually focus on students, on the courses you teach, or the research that you do. The most important questions are who will be accessing your collection of resources, and why will they be doing so? What “jobs” are they trying to get done when they access your collection, and how will it help them? Your collection of resources should either meet your own needs, or the needs of your audience.

We therefore suggest you are clear on the following:

- Your audience. Is this your students, colleagues in the university, the general public, or an international network of collaborators? It may just be for yourself, to help you organise websites and online videos you find useful or interesting.
- Your purpose. This is of course linked in part to who your audience is, but try to be clear about the specifics of the purpose: if you are using curation to support your teaching, is this for a year group, module, or specific session? We have used curation to support all of these, but there are different requirements for each which will impact on the choice of platform and how you present the materials. For example, a specific session may require a small group of resources linked together e.g. in Wakelet or Sway, whereas a collection supporting a module would need to be larger and searchable, e.g. using Scoop.it or Diigo.
- Collaboration. Do you want others to co-curate with you? Not all platforms support this. We will discuss this further below.
- Will the collection be public, private, or restricted to a specific group? Public collections are good in raising your profile and can help in building a personal learning network, but not all curation platforms are equally good for this. Other uses are more suited to a restricted or private approach, for example if you wish to discuss student work on the platform.

2. Select an appropriate curation platform

There are an increasing number of platforms to choose from, and we suggest trying out some of the ones listed below, and any others you may have heard of. Our list is very far from exhaustive. We have trialled and tested several in our academic work – please see our technology reviews for a summary. Below we present some examples of the available platforms according to the job you may need them to do (again, this is not exhaustive).

Job required	Examples
Presenting pre-reading / curated online tutorials (linear structure)	<p>Blogs – allow you to arrange resources in a linear fashion with linking text. Public.</p> <p>Sway – free from Microsoft. Various layouts, and can restrict viewing, so not all public.</p> <p>Wakelet – linear design, with linking commentaries between resources.</p>
Personal web organisation (including social bookmarking) and notes	<p>Diigo – free tool, with paid options (including for educators). Allows “sticky notes” to be added to web pages; social bookmarking; organisation via tagging; grouping resources via “Outliners”. Public or private.</p> <p>Pearltrees – free tool with paid options, including for educators. Online resources or “pearls” can be linked together in collections. Public only with free version; private collections available with Premium version.</p>
Presenting collections of images, e.g. photos, infographics, diagrams	<p>Pinterest – free tool; presents attractive “Boards” onto which you “pin” resources. Great for visual resources. Boards can be public or private.</p>
Browsable collections of multiple types of online materials	<p>Scoop.it – free tool with paid options (including for educators). Magazine-style, with commentary easily visible; organisation via tagging.</p> <p>Flipboard – free tool. Organised into “magazines” of curated resources, large number possible per user.</p> <p>Pinterest – as above; best for image collections</p> <p>Pearltrees – as above; hosts all types of resource, and allows easy organisation into groups</p>
Collaborative curation and resource collection building	<p>Scoop.it – education licences (paid, but inexpensive) allow multiple topics with multiple curators per topic.</p> <p>Pinterest – free for multiple contributors per Board</p> <p>Flipboard – free for multiple contributors per magazine</p> <p>Pearltrees – free for multiple contributors to topics</p>
Collaborative document creation, curation and sharing	<p>Learnium – available through licences. Has online spaces for curation, discussion (social media posts) and collaborative document production. Groups can be set up.</p> <p>Yammer – part of Microsoft Office 365. Not viewable publicly but can be set so all the organisation or only invited members can see a group. Curation is possible, and collaborative document editing is available.</p>
Developing a personal learning network	<p>See below for more detail. You will likely need multiple platforms to achieve this, linked up to other social media accounts. Recommended curation platforms to support this are: Scoop.it, Flipboard, Pearltrees and Pinterest; in addition, Diigo can be helpful to organise materials and keep notes.</p>

3. Select appropriate, high quality, resources

If your collections are to be useful to your audience, the material they contain should be of high quality and appropriate to their needs. They need you to have done the work of selecting the best the web has to offer in a particular area, so they don't have to, or finding something that warrants discussion. Done well, you will likely end up with a loyal following. To do this, you will need to assess each resource carefully, and review its content. This can be quite time-consuming. We suggest you consider the following:

- **Trust:** Do you trust the author? Is this stated anywhere; are there any issues with bias? Has the resource been peer reviewed?
- **Accuracy:** Is the content accurate? Is it up-to-date?
- **Understandable:** Is the content easy to understand and appropriate to the level of the audience of your collection?
- **Accessible:** is the resource freely available, or are there any restrictions on access, e.g. do you have to be a member of an organisation to view it?
- **Legal:** Are there any copyright issues? Check if the resource has a [Creative Commons](#) licence, and how this allows you to use it.

Many web-based resources will be specifically designed for educational purposes, and therefore the educational design of these learning resources is important. Features shown to improve student satisfaction and learning include interactivity, discussion forums, and questions with feedback[4]. Multimedia design principles have been reviewed extensively elsewhere [5-7] and it is worth becoming familiar with these when evaluating resources.

4. Provide a commentary

This is your opportunity to add value to the resources you have collected. If you are aiming your collection at students, you might consider commenting on why you selected the resource, and who in particular you think might benefit from seeing it. With most audiences, it is helpful to say what you thought of the resource, what does well, and what is less good. In some cases, you may be looking to initiate a discussion e.g. on a news article, or new finding in your field, in which case posing some questions at the end is helpful.

With some platforms, commentaries are less prominent, and so you may simply wish to use these to collect resources in one place rather than present them as a set. We will cover this in more detail under how to Develop your Curation Workflow.

5. Organise your resources

There are various ways to do this, and it will largely depend on the platform you use, but it is important to do this as collections can quickly get very large, making it difficult for your audience (and you) to find the resource needed. Some platforms use tagging, which allows you to attach key words to your resource that your audience can use to search with. It is helpful to try and anticipate the sorts of searches that may be needed, e.g. according to module, session, or topic, and to attach as many tags as you can when you have selected a resource for your collection; this is often possible when you click the bookmarklet tool, if one is available for your chosen platform.

Some platforms will allow you multiple collections (which may be called topics, magazines, boards, etc), so some differentiation is possible by setting up collections with different titles. There may be a limit on the number of collections you can have on some websites however.

Some platforms, for example Diigo and Pearltrees, have additional means of organisation. Diigo uses “Outliners”, which essentially provides an outline structure for topic and resource organisation, and allows subsections within this. Pearltrees allows organisation into groups, which have a relational branch-like structure, which allows you to explore similar resources in an easy-to-visualise way.

6. Collaborate where possible

The ability to collaborate on a collection is a powerful way of diversifying the content and encouraging multiple perspectives. It also makes the work of maintaining the collection easier as it spreads the workload. Many platforms allow you to do this e.g. Pinterest, Flipboard, Diigo; some may require you to upgrade to a paid version before this becomes possible (e.g. Scoop.it).

Choosing who to collaborate with is the most important decision you will need to make, and this largely depends on your decisions made under point 1 – defining the job you need to do. With web-based curation tools it is possible to collaborate internationally, but equally it is possible to set this up so that your co-curators are your students or local faculty. To maintain the highest quality, you should ensure everyone on the team is clear what the aims of the collection are, how to organise the resources, and what responsibilities they have. You may need to have a process of editorial review, for example if you have a large number of collaborators and you are presenting a very specific, well managed final resource – we will discuss this further under developing your curation workflow.

7. Develop an online Personal Learning Network

Online Personal Learning Networks (PLNs) can offer substantial benefits to your own professional development as an academic [8, 9]. In our experience, curation platforms can contribute positively to PLNs. Not only do curation tools allow you to develop collections around your own interests, but these can easily be shared on social media sites such as Twitter or Facebook, and via the curation site’s own social features (usually via a “follow” feature). It is equally easy to browse and find others in your network who use such platforms and follow them. Once you start discussing the resources others are posting you will find that many will follow you back, and you will be developing a PLN. The benefits are substantial – you can open discussions with people from all around the world, develop your own understanding, and share your thoughts and resources with others.

You may find development of a PLN daunting, particularly if you are not yet confident in using social media in a public space for professional purposes. You may wish to set up professional accounts for this activity, to keep these uses separate from those where you interact with friends and family, or perhaps use different social media sites entirely. There is no right or wrong way; we recommend that you approach it in a way that you feel comfortable with.

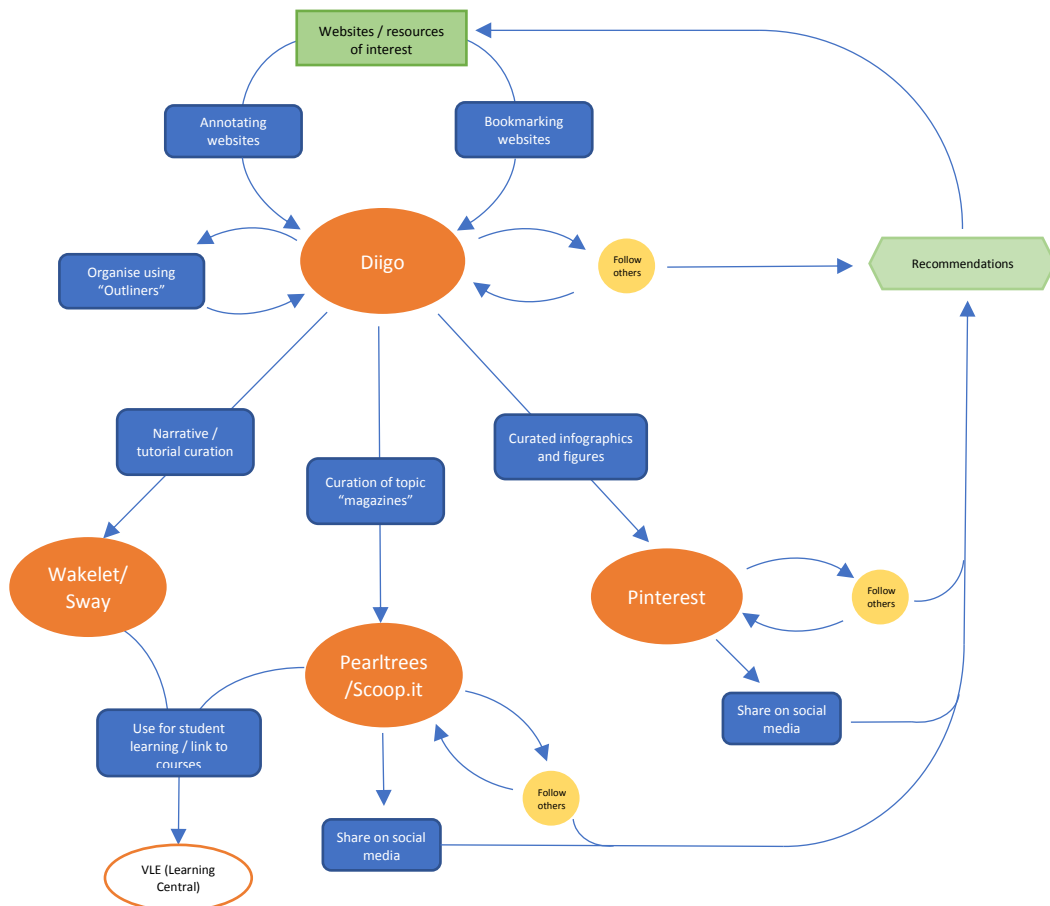
Curation can fit into a PLN in many ways, and you will likely need to decide on how you wish to interact and gather information and new resources. Do you wish to have one main curation platform for sharing resources and hosting discussions, or do you want to do this from several? Which social media platforms do you wish to use, and which groups do you wish to be a part of? As with all social activities, it is best to focus on building relationships with other like-minded users, and therefore using a small number of platforms well, rather than spreading out everywhere on the internet where

it may be difficult to keep track of things. Regular use is needed to maintain your presence in the group and keep discussions active, or if this is problematic, arranging for discussions to happen at a regular time on a specific website.

8. Develop your curation workflow

As we have seen above, curation is not a single activity, but a collection of activities. You may be doing it alone as a personal development activity; with students as part of their learning; or with colleagues as resource development. You may be curating for all of these reasons. Developing a good system is important if you are to be as efficient as possible. This can be done in several ways, and we will here discuss developing your own personal workflow, and developing a system for managing a team of curators producing a collection of resources.

Personal curation workflows may involve one or more curation platforms, depending on how you like to work. We have developed different individual approaches, and one is given below:



In the above workflow used by one of us (DC), Diigo is used as a knowledge management tool, to capture all web-based resources, annotate them, and organise them using tagging (good for searching), and Outliners (which have a hierarchical structure and are easy to navigate). Diigo also has sharing features, with groups based around specific interests and other users who you can follow and who can follow you – hence the two-way arrows, but these are (at the time of writing) less active than other curation websites. The resources collected in Diigo are then used to develop

collections for specific purposes. Wakelet and Sway are used if a short tutorial is required, e.g. for pre-reading; these can easily be embedded in a VLE such as Blackboard. Pearltrees, Scoop.it and Pinterest are used to host browsable collections on specific topics, and these are used for sharing with others including via social media and on the VLE. Pearltrees, Scoop.it and Pinterest are used for developing a PLN by browsing collections curated by others and discussing their selected resources. Recommendations from any source as part the process are reviewed and added to Diigo as required.

Curation workflows are more of a challenge if you manage a team of curators, and you may simply wish to allow everyone to post directly to the website as you see fit. In other circumstances, you may want to keep closer editorial control, in which case you will need to develop a system to do this. We would suggest using a model similar to one of those discussed above, such that one platform or topic within a platform is used as the pre-release stage, and which all curators have access to and can post to, and a final curated page which a small number of lead curators post to. The pre-release webpages may be private, and the final pages public, if you do not want everything to be visible in the working stages. This approach allows you to oversee the content, check it is appropriate, provide feedback to the contributors, and manage the release of new material.

9. Back up your curated topics

Online content curation platforms are usually commercial offerings, and technology does move on. In the time we have been active in this field, Storify has stopped its free service following its take-over by Adobe, and so we have had to move our curated collections to another platform (www.wakelet.com). Del.icio.us has also become obsolete. Others may present difficulties with the technology or with customer service, which may prompt moving to another platform. And of course, sites may fail and the servers may go off-line. We therefore strongly recommend that you back up your work on a regular basis, and where possible enlist the support of IT professionals in your institution.

Curation platforms are increasingly offering download / export functionality. Diigo, for example, offers a variety of formats to export your data, including in CSV format, and captures all the website addresses, your commentaries, and bookmarks. Pearltrees likewise has an export function although this is less flexible than Diigo, but it does do the job well exporting to html or rdf formats. Moving platforms may be a nuisance, but if you remember to back-up your work it should remain a nuisance, rather than result in complete data loss.

10. Enjoy!

Yes, curation can be fun! When working with interested others it can help expand your horizons in your field of interest and promotes a team ethos to learning. If you find a way of using it to your best advantage and you will have a way of discussing ideas, sharing interests, and engaging and learning from others. This is what has kept us interested and persuaded us that this is a valuable way of enhancing learning and teaching in higher education.

Summary

Content curation has substantial potential to enhance electronic resource management for both students and staff. Clear attention to the principles outlined in this guide will help to maximise the benefit you derive from this activity. It is also highly enjoyable, and when staff and students

collaborate can be very valuable for both parties. It may initially look daunting, but just having a go, and using this guide as a starting point, will help you develop your own collections.

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