APPROACHES FOR CURATION OF OPEN EDUCATIONAL RESOURCES

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Abstract

Open Educational Resources (OERs) are teaching and learning materials which are feely accessible, openly licensed documents and media that are useful for faculty to include them in their eLearning courses or giving them as the additional reference material. These may be freely used and reused at no cost, unlike fixed and copyrighted resources. Many OERs can also be given as the suggested resources list while offering Massive Open Online Courses (MOOCs). These resources consist of library of courses, research reports, eBooks, manuals, selected reading lists, audio, video etc..Simply aggregating a list of OERs is not practical, however, listing too many sources may overwhelm the students. OER curation is important among the available list of OERs to fit to the students need.

This paper is aimed to discuss the OER curation, approach including their benefits,technical approaches to curate the content to the Open and Distance Learning students and opportunities.

Keywords: OERs, Content Curation, Annotating, ODL

1. Introduction

Creating an Open education ecosystem involves making learning materials, data and educational opportunities available without restrictions imposed by copyright laws, access barriers or exclusive proprietary systems that lack interoperability and limit the free exchange of information. Open Educational Resources (OER), are freely accessible, openly licensed documents and media that are useful for teaching, learning, assessing and for research purposes. They offer a growing library of courses, research reports, ebooks, textbooks, manuals, selected reading lists and annotated bibliographies freely accessible by anyone across hundreds of different online repositories and institutions.

There are abundant and variety of OERs available today and the content is growing day by day. The abundance of OERs is both a blessing and a curse. Because digital instructional materials are plentiful, it becomes increasingly harder to find the appropriate ones. While many teachers have a good idea of what they are looking for, search results may return thousands of options. Selecting OER and trying to decipher quality among similar resources is like searching for a needle in a haystack. And the time spent searching and evaluating is time that could be better used working directly with students, helping each one of them learn and succeed.

In many cases finding the learning resources is the easy part. The challenge lies in selecting the best ones and compiling them at one place in a meaningful way. OER will commoditize education content; nothing can stop that [Ferreria, 2014]. So, the curation of the OERs is required.

OER curation involves finding, organizing, annotating, and sharing OER that is relevant to curator. Content curation of OER comes in two forms:

(i)   Simply curating links to third party OER;
(ii)   Licensing curated OER to host on your media property.

It is the process of sorting through the vast amounts of Open Educational content on the web and presenting the best resources in a meaningful and organized way. In the context of a course, the content curator's role is to identify the lesson theme/topic, provide the context for the students, and decide what content to present and how it should be annotated. Another approach is to empower your students to become content curators themselves. Content curators provide a customized, vetted selection of the best and most relevant resources on a very specific topic or theme (Kanter, 2011). It can take the form of an RSS feed, links posted on blogs, social media feeds, or an online news mashup like the ECDaily, Videos, articles, pictures, songs, or any piece of online digital content that can be shared can be curated. Curation can be done using social bookmarking, examples being Delicious and Digg, both social bookmarking sites that allow users to share content and vote.

Content curation is a critical skill in this era of information overload. It goes beyond just about collecting or filtering, and is more about adding value by organizing and presenting relevant resources on a given topic. For

instructors and subject matter experts, curating OERs is a way of contextualizing resources to provide a well organized learning environment, a way of guiding the learning experience by presenting essential categories, themes, and relations.

Providing information about OERs lays the groundwork for a rich learning environment. Essential information will include some or all of the following as shown in the table 1:

Table 1: Information about the Curated OERs

Title of the OER	Citation of the Source	Summary with some Annotation	Link to Resource	Notes on Learning Activities

2. Why Curation of OERs?

Without purposeful curation, it is impossible to realize the full impact of OERs. There would be no consistent approach to the acquisition and use of digital content to inform the improvement of teaching and learning practices. Not only does curation help to ensure the quality of resources that are being utilized for instruction, but it also promotes equity, especially when those resources are incorporated within an accessible digital curriculum. The following are some of the reasons for the OERs curation:

- Preserving instructional time
- Utilizing resources more effectively
- Providing greater access to content
- Promoting equity among users
- Protecting digital rights
- Supporting online safety
- Saving money and resources
- Ensuring quality in content
- Nurturing a sense of community

3. OER Curation Activities

Curation for digital learning ecosystem entails more than just collecting, gathering, and organizing. The process of curation involves the following purposeful activities like:

- Knowing what your learners need
- Selecting content at multiple levels and from diverse sources
- Evaluating content for quality, including relevance and authenticity
- Creating essential content that cannot be located externally
- Annotating content to provide meaning and context
- Organizing content to facilitate searching and productivity
- Storing content to ensure safe, reliable, and equitable access
- Archiving content that may no longer be relevant
- Deleting content that is no longer necessary
- Communicating about content to the expected users
- Sustaining the content with a thorough plan of action

4. Models of OER Curation

Over time, the idea of OERs curation has felt like more and more of a catchphrase that is really encompassing many smaller activities that are adding structure and insight to the cacophony of information being published online. There are actually a number of different methods of OERs content curation to consider. The method you choose depends on the needs of your online learners, available online resources, and time constraints. Here are some of the most common methods:

i. **Manual Indexing and Recommendation** – It is the most common method of creating an aggregated set of resources. This is a static collection of resources. This is a natural parallel to the idea of creating a reading list for a class or a research bibliography.

ii.   **Aggregation** – There is a flood of information online and Google can only give you a best guess at the most relevant, but there are millions and millions of pages returned for any search result. Aggregation is the act of curating the most relevant information about a particular topic into a single location.

iii.   **Distillation** – The idea behind distillation is that adding a layer of simplicity is one of the most valuable activities that someone can undertake. Distillation is the act of curating information into a more simplistic format where only the most important or relevant ideas are shared. As a result, there may be quite a bit of additional content that is lost for the sake of simplicity – however the value comes from the fact that anyone digesting this content no longer has to contend with a high volume of content and can instead consume a more focused view of information.

iv.   **Elevation** – Elevation refers to curation with a mission of identifying a larger trend or insight from smaller daily musings posted online. Encompassing much of what many trend-focused websites do, this can be one of the hardest forms of content curation because it requires more expertise and analytical ability on the part of the person or organization during the curating. The benefit is that it can also be the most powerful in terms of sharing new ideas as well.

v.   **Mashup** – Mashups are unique curated juxtapositions where merging existing content is used to create a new point of view. Taking multiple points of view on a particular issue and sharing it in a single location would be one example of this type of behavior – and could be used to describe the sort of activity that takes place every day on Wikipedia. More broadly, mashups can offer a way of creating something new while still using content curation as a basis for it because you are building on existing content.

vi.   **Chronology** – One of the most interesting ways of looking at the evolution of information is over time – and how concepts or our understanding of topics has changed over time. Creating a Chronology is a form of curation that brings together historical information organized based on time to show an evolving understanding of a particular topic. Most useful when it comes to topics where understanding has shifted over time, this can be a powerful way of retelling history through informational artifacts that exist over time to prove how experiences and understandings have changed.

vii.   **OAI-PMH** (the Open Archives Initiative Protocol for Metadata Harvesting) – It is widely implemented in the repository software used by many institutional and subject repositories. It is based on the principle of having data providers and service providers. Data providers allow access to their collection of metadata through appending a limited series of specific commands to a designated base URL. Service providers use or build dedicated software send these commands to the repository to query either individual records, aspects of the repositories setup or harvest part or all of the repository's metadata.

viii.   **Syndication Feeds**: RSS & ATOM – They are supported by web content management systems and repository a platforms; likewise a wide range of implementations of aggregation software exist for collating the information from many feeds into a single database. Most relevant example for the UK OER programme is the Xpert OER Catalogue from Nottingham which aggregates feeds from OER providers. Jorum has also used RSS to facilitate bulk deposit of records describing OERs into their repository.

ix.   **Shared Tags in Bookmarking and Status Sharing Tools** – Publishing a list of resources through web based tools designed to share links or snippets of information and apply a tag to the link. This approach takes a manually curated collection of OERs but shares them a resource at a time using online tools that typically allow users to view and follow the activity or updates of other users and which provide some form of notification and filtering functionality. Examples are the tools like Delicious and Diigo.

5. Opportunities

Content curation is certainly an emerging space and one where more and more thought leaders will continue to share their voices. The following are the opportunities:

- Finding, selecting and organizing quality open educational resources. This is where the opportunity lies.
- Traditional academic institutions may become trusted curators and guides to the greater universe of information out there, while focusing their efforts toward a set of specific areas, needs and communities of interests.
- To curate the fast-growing amount of learning and educational resources available out there, may be one of the most appealing and cost-effective opportunities that traditional academic and training institutions may have at this point.

- As learning and educational content will become overabundant and ubiquitous, individuals and organizations who will be able to be the first to gain authority and reputation in identifying, selecting and organizing the best and most appropriate free / open courses for anyone specific needs, will be the ones in high-demand and worth spending money into.
- There will be a growing need to collect, organize and make-sense of this vast amount of "open" learning courses and educational materials, by creating "curated learning paths" for specific audiences and needs.

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