Information Literacy and RSS feeds at LSE

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This chapter describes how RSS has been used at the London School of Economic and Political Science (LSE) to enhance access to information on training courses, including information literacy classes, for staff and students. RSS underpins much of what we recognise as Web 2.0 and social software. In his recent book, Bradley (2007) argues that in order to fully exploit social software in libraries, it is essential to understand RSS technology. Even a basic understanding can allow all librarians, not just those running a schedule of teaching or training, to make their information more accessible. However, our experiences show that RSS has information literacy implications: users must re-think how they access information on the web. Rather than visiting a website to see what is new, users are afforded a mechanism for picking up new information automatically. The tools required, while simple to use, arguably do require a greater level of information literacy on the part of users. Therefore, paradoxically, while RSS has provided LSE with an opportunity to make training information more widely available, staff and students need greater information literacy skills to fully exploit the technology.

What is RSS?

There is still some disagreement over what RSS actually stands for. Originally, it meant RDF Site Summary (where RDF is the Resource Description Framework), but it is now generally agreed to stand for Really Simple Syndication. Each definition provides an insight into its potential uses: as a “summary” of what’s new or has recently changed on a website; or as a method for “syndication” of content, allowing information to be reused in a variety of contexts.

RSS is a dialect of XML. It is a machine-readable language, much like HTML, designed to provide a rigid framework in which information can be contained. At its simplest, an RSS document provides a set of items, each of which has a title, a description and a link to an online resource. A series of items, almost always provided in some kind of chronological order, makes up a feed. The feed itself contains additional metadata indicating, for example, the source (e.g. the website) from which the items were drawn, the time and date of its publication, and the contact details of the publisher.

Since a feed is broken down into individual items, it follows that the medium is really only suitable for publishing quantized information. This explains its rapid uptake within the news media: each item corresponds to a discrete news story. In this example, the headline becomes the title, a short summary of the story becomes the description, and the link is a URL pointing to the full version of the story. Similarly, blogs provide an RSS feed, each item corresponding to an individual post. But a link need not point to a web-page: a “podcast”, for example, is simply a series of audio files whose URLs have been published in an RSS document.

From a user perspective, the strength of RSS lies in two additional pieces of information contained within a feed: its publication date, and its time-to-live, i.e. the period of time a given copy of the feed remains valid. This allows the user to “subscribe” to the feed using an RSS-reading tool (such as the web-based tools Google Reader or Bloglines), which, when the document expires, will check to see if there is a newer copy available, and if so, to present it to the user without his or her intervention. A user who previously visited a large number of online resources to see what, if anything, had changed now need only open their RSS-reader of choice and immediately find new items of interest.

There are online services that provide RSS-reading capabilities, such as Ask.com’s Bloglines, and iGoogle, a personalised homepage service offered by the search provider. Additionally, there are stand-alone RSS readers that can be installed on your PC and do not use a web
Training at LSE: the problems

LSE has a number of training providers in different departments throughout the School. These include: the Library, IT Training, the Centre for Learning Technology and the Teaching and Learning Centre. Each maintains its own website which lists the upcoming training sessions they offer. However, staff and students had, until recently, no way of knowing which department provided specific courses without visiting each website individually. Past discussions aimed at resolving this problem had focussed on providing one, centrally-managed website listing all upcoming courses, and an online booking system for all. However, departments had invested time and resources in their own databases and booking systems, each tailored to their specific requirements, and were reluctant to invest in the development of a new system.

Despite their differences in implementation, all LSE’s training providers’ websites share obvious similarities: they publish information about individual training sessions according to a schedule, and provide a mechanism to book online. RSS presents itself as an obvious format in which to republish the information, since each training session corresponds nicely to an RSS item. If all providers were to publish an RSS feed of their upcoming sessions, we could re-use the data in a number of ways:

- embed the feeds in websites, including the institutional portal, LSEForYou, to allow content to be displayed dynamically;
- embed the feeds in the institutional VLE, Moodle;
- display the contents of feeds on plasma screens around the campus;
- combine the feeds into a single, central webpage linking to the appropriate booking system.

Over time, as awareness of RSS grows, we hope staff and students might choose to subscribe to the training feed. Regardless, we are able to provide the same information in multiple online locations.

How we used RSS feeds at LSE

The RSS 2.0 namespace – the convention describing what kinds of data may be included in a feed – only allows for a limited number of elements. However, since RSS is a subset of XML, it is extensible by referring to additional namespaces. In addition to the title and description fields, our implementation requires a way to indicate the date and time of a training session, its location, the department or individual who is running the session, and the audience for which it is intended (e.g. staff or postgraduate students). By referring to two additional namespaces in our RSS documents -- the RSS Events module, and the Dublin Core Terms namespace – we are able to provide this information while ensuring the document remains valid XML. This is important, since much RSS-reading software will refuse to display invalid XML.

Every day, each training provider runs an automated program that generates an RSS feed by querying their course database. Another program collects all these RSS feeds and aggregates the information for display on a single page (figure 1). The inclusion of scheduling information allows this page to display the sessions in chronological order, and the audience metadata allows users to filter the list for courses tailored to their requirements. Now, users do not need to know in advance who is offering a particular course, since each item on the page contains a link to the organising department’s booking system.

In addition, the aggregating program generates new RSS feeds for specific audiences. The student feed can then be displayed in the School’s institutional VLE, Moodle, which is equipped to
handle RSS. The institutional portal, meanwhile, recognises a user’s status – e.g. staff or student – and provides information and tasks appropriate to that role. This now includes our training feeds.

Finally, LSE has installed a number of large plasma screens around the campus, displaying room-bookings, computer workstation availability and public lectures. We decided to take advantage of their presence by providing our training schedule, formatted in large type for display on these screens. In this way, passing staff and students might notice an interesting course, and visit the training portal for more information.

**Figure 1: The LSE Training Portal**

![The LSE Training Portal](image)

**Other ways LSE are using RSS technology**

The Centre for Learning Technology are also using RSS technology to feed news content onto their website. The Centre maintain a blog where all CLT staff can post information they wish to share with their colleagues or anyone interested in learning technology more generally. However blog postings that are particularly newsworthy can be designated as ‘CLTNews’ which means they automatically appear on the CLT home page in the news section on the right of the screen. Figure 2 shows how this news information appears on the CLT home page. Posting news to a blog, but also having the content appear on the website saves time and effort and helps ensure the website looks up to date.

**Figure 2: The News content on the CLT website comes directly from the CLT Blog**
Other Libraries Using RSS feeds

In the United States a number of libraries are using RSS feeds to make their information more accessible. For example MIT Libraries (http://libraries.mit.edu/help/rss/barton/) are using RSS to publish information about new books being added to the library catalogue. Feeds are published in numerous subject areas and this can be added to a feed reader or incorporates into any web page. This functionality could be particularly useful for an academic department, allowing them to add the feed to their own web pages or directly into courses in the virtual learning environment. MIT Libraries also have a general library News feed and a feed for new theses added to their repository. They also maintain a useful link of RSS feeds for research which includes information about which publishers offer RSS feeds. For details of this page see http://libraries.mit.edu/help/rss/feeds.html

Meanwhile, Amazon also provide RSS feeds for new books on a huge variety of subjects, which can also be used in a variety of different ways. More details about the Amazon feeds are available at: http://www.amazon.com/gp/tagging/rss-help.html. Increasingly publishers and library databases are also adding RSS functionality to enable users to set up feeds for searches they may wish to run frequently. For example, Ebsco and Web of Science recently added RSS feeds to their databases, so in place of having search results e-mailed to you, a user could set up a feed to have searched results pushed to them. Once again Sauers (2006) is a valuable source of information about how libraries and other organisations are using feeds, with chapter eight looking specifically at how you might create feeds yourself.

The future at LSE

At LSE RSS technology has provided an ideal solution, bringing disparate training information from four providers together in one site, the Training portal (training.lse.ac.uk). Users visiting the site can filter courses to display those suitable for staff, or those for students. The team are planning a formal launch with students at Fresher's Fair in Autumn 2007 and are currently developing a logo and promotional giveaways with the web address prominently displayed. The site has already been promoted to staff through the weekly internal e-mail newsletter. The team have recently invited several other LSE training providers to join the initiative including the Staff Development Unit, the Language Centre and the Careers Service and have been exploring whether their courses can be included. The intention is that in the future all non-academic course information could be accessible through the Training Portal.
The other key advantage of using RSS to power the Training Portal is the ability to incorporate a link to the site and the feed into other websites. So for example, the RSS feed has been added to Moodle and the institutional portal. Each training provider still maintain their own website with details of their own courses and a booking system, but both IT Training and the Library website have a scrolling link to the feed displaying other courses running in the next week. Eventually, if our users are using feed readers and fully understand RSS they may wish to subscribe to the feed to be updated automatically.

**Conclusion**

As Bradley (2007) and Sauers (2006) recognise, RSS, despite its relative simplicity, is an enormously powerful technology which changes the way information is made available on the web. It also allows information to be presented in a variety of different ways for different audiences.

RSS, as well as providing a valuable solution to enhancing training provision at LSE, is arguably another tool along with search engines, that can be hugely valuable to those with well developed information literacy skills. In Autumn 2006 LSE offered a new course for staff that focused on finding and reading blogs and using an RSS reader. The course was taught by staff in the Centre for Learning Technology and explaining clearly how RSS works was a key task for the trainers. Unsurprisingly, grappling with this new way of reading the web was challenging for many attending the course. In Autumn 2007 library staff and learning technologists will work together to develop a new course for PhD students and researchers on utilising RSS to keep up to date. This course is partly as a reaction to the increasing number of publishers and library systems that have added RSS functionality into their databases. Librarians and trainers elsewhere may also find themselves having to teach users about RSS, and how to identify and use feeds. It is difficult to predict how RSS technologies will develop; for some researchers already, checking their feed reader can be as important as checking their e-mail account. In fact, it is even possible to check your e-mail using RSS technology. However as technology develops it is clear that teaching people to navigate the web and to find the information is a skill that constantly needs updating to take into account new tools and technologies. RSS is currently an important tool that trainers can use, but one which requires support if our users are to exploit it fully.

**References**


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3 See, for example, the BBC News website - [http://news.bbc.co.uk/1/hi/help/3223484.stm](http://news.bbc.co.uk/1/hi/help/3223484.stm)
5 [http://www.google.com/ig](http://www.google.com/ig)
6 We agreed a controlled vocabulary for the “audience” metadata. See [http://training.lse.ac.uk/docs](http://training.lse.ac.uk/docs) for more information.