JORUM[60]

Completed by Antonio Vetrò and Anita Tabacco of Politecnico di Torino, Turin.

Case Study Overview

Type of initiative: Repository for discovering and sharing OER for HE, Further Educations and Skills.

Country: United Kingdom.

Organization behind the initiative: Joint Information Systems Committee (JISC).

Type of organization: Non–departmental government body.

Who funds the initiative?: JISC.

History and Goals of the Initiative

The Jorum platform is one of the biggest online repositories for learning and teaching purposes. It has been founded by JISC, a non–departmental public body (i.e., not related to any specific government department, but supporting ministers' work) in the United Kingdom in 2002, and has been run jointly by the JISC National Data Centres, EDINA[61] and Mimas (since 2014 part of JISC's digital resources division). The project initial goal was to develop a national repository to store the outputs of national funded learning and teaching resources.

Between August 2008 and August 2011 the development of the second Jorum's "Service in Development" took place. Jorum made use of a commercial software platform to host educational resources uploaded

---

[60] http://www.jorum.ac.uk

[61] http://edina.ac.uk/

by staff from registered educational institutions in the UK, and make them searchable. However, by August 2011, Jorum successfully concluded an important transition by shifting to an open model, both from the software point of view and from the type of users perspective. In fact JISC customized an open–source software platform and permitted people worldwide – and not only UK registered users – to utilize the service.

With such a shift, Jorum became an OER platform. This change implied a significant effort in terms of engaging with the education community (to gather requirements and communicate new developments) and of providing support for the increasing number of users (through telephone and email by the EDINA helpdesk, with the Jorum team providing second–line support for more complex queries).

The Jorum platform today contains more than 16,000 educational resources, licensed under CC licenses, most of which (over 9,000) have been acquired by an ad–hoc programme, i.e. the second phase of the JISC/HEA OER Programme, which aimed at extending the range of materials openly available, documenting benefits offered by OER to those involved in the learning process and enhancing the discoverability and use of OER materials.

The learning resources contained in Jorum range from single documents to more complex resource packages (e.g., full courses or interactive units).

In September 2016 JISC will retire Jorum and refresh its OER offer, with a shift that will allow new forms of collaboration and communication between the Jorum users.
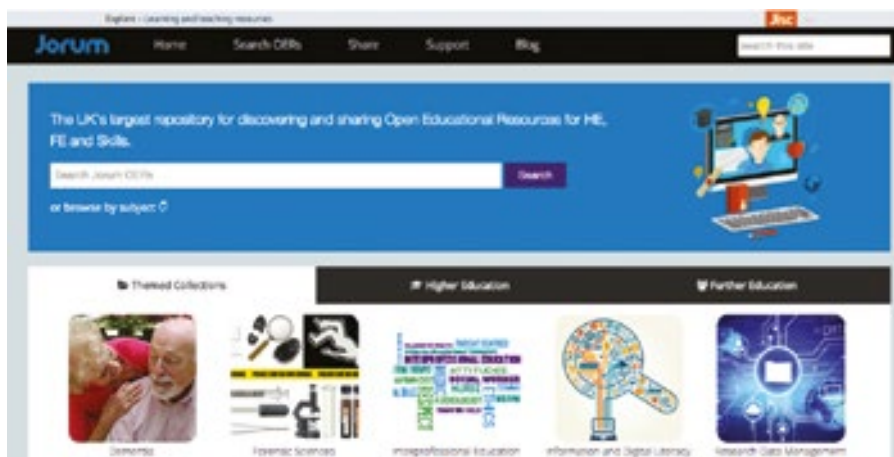
Figure 11: Screenshot of the Jorum Homepage

Key Aspects of the Initiative

Jorum's primary aim is to support communities of lecturers who can share, reuse and re–purpose learning resources in all discipline areas.

In this section we enlist and describe four distinctive aspects that helped Jorum in achieving its goal and made it a successful initiative worldwide.

Multi–stakeholder Governance

As described in the previous section, a relevant aspect of the initiative is that its development has involved multiple stakeholders: the Joint Information Systems Committee (JISC), the JISC National Data Centres, EDINA and Mimas. The collaboration of the different actors involved in such multi–stakeholder governance has allowed the flexibility necessary to go through a number of necessary transitions. In the first one, between August 2008 and August 2011 (Jorum's second "Service in Development" project), Jorum moved from being a national repository whose access was limited to UK registered teachers to being an open platform providing worldwide users the possibility to find, share and discuss thousands of learning material. This substantial change has been achieved through close collaboration between the two JISC National Data Centres, with Mimas leading on Engagement, while EDINA has led on Content and Infrastructure. The task of managing a project whose team is split across two organisations and

three geographical locations has presented some challenges and at the same time has brought many benefits such as the ability to more effectively engage with Jorum's wide audience.

Engagement Model

Another relevant aspect is the effort by the Jorum team to engage users through different activities and with different goals.

The first objective of the Jorum model engagement is to raise awareness through conferences, academic publishing, email marketing, case studies: staff from both Mimas and EDINA presented the platform at over 100 events so far. Such involvement is effective for meeting stakeholders and potential users face to face as well as to establish and maintain relationships. In addition to conferences, papers studying the impact of sharing resources and shorter articles were published in a variety of venues. Throughout the course of the project, news have been released to communicate changes to Jorum and highlight the benefits of sharing learning materials, and are distributed through press, email (including JISC mailing lists), blogs, social media and the Jorum website, which is also continuously updated to be a reliable presence online. Finally, an important successful engagement activity has been the Learning Object Competition with prizes to engage teachers in sharing their learning resources.

As part of the engagement strategy, support for users is provided through telephone and email by the EDINA helpdesk, with the Jorum team providing second–line support for more complex queries. The project provides also training, however with the move to open licences, the adoption of a simpler metadata schema and interface, and the increased popularity of online training, traditional training events are becoming less necessary.

Collaboration with other initiatives is also a further engagement tool. The team has explored joint activities with a number of other projects in order to deliver mutual benefits and maximise efficiency. Examples of collaborative activities have included joint events, shared knowledge, experiments with technology and assisted population of the platform.

Finally, Jorum's key collaboration is with its users, who help to shape the service by defining requirements, providing feedback on prototypes and releases, and using and promoting the service. Working with users is achieved through user groups, social media, forums, user testing, studies and surveys.

Socio-Technical Framework for Content Acquisition and Management

The main asset in Jorum is its educational content, which is available for everyone. Much of the content has been acquired during the JISC OER programme, while significant other learning resources have been acquired through several initiatives with partners, including universities (e.g. the Open University or the Staffordshire University) and other projects and centres (e.g., the Information Computer Science Subject Centre, the GEES C–Change Project). The educational artifacts coming from these external projects have been deposited into the Jorum open collection through a plethora of technical mechanisms: in bulk, through APIs, RSS feeds, the web user interface or other specific tools (e.g., Selenium). Such flexibility in content acquisition has been possible thanks to the transition of Jorum towards an open platform based on DSpace and an inclusive development process in which the Jorum team has worked closely with users to gather requirements. In addition, the development team has introduced user–centreed techniques such as ethnographic studies and user testing into the development process.

Therefore the development of the Jorum platform is the result of an extensive engagement activity with the education community in the UK and worldwide. By responding to community feedbacks, the team adapts its focus not only to promote the content of Jorum to teaching professionals, intermediaries such as learning technologists and librarians, but also develops platform services to allow users to upload and promote their own content more easily. These services range from a simple API and widgets, to collaborative–oriented features like conversations or participatory events that take place around the content and are based on Web 2.0 technologies.

The technological infrastructure described above is bound to a legal framework, processes and policies that support the Jorum service. The

legal framework has been developed in conjunction with the University of Edinburgh, and consists of the Terms and Conditions, a Notice and Takedown Policy, a Privacy Policy, and a Collection Development Policy. This framework disciplines also the use of licenses for the content reuse, mainly CC licenses and the Jorum Education UK licenses.

Openness to Change

We have described as Jorum underwent through two major transitions, that influenced each other: the shift from a closed–source platform to a (customized) open–source platform and the shift from being a UK–based platform to being usable by anyone in the world. We have seen that a key role in those transitions has been played by the strong engagement with the education community that was not only a force pushing towards the change, but also a force that supported and drove it, thanks to the deep involvement of the users in the development process of the platform.

Such openness to change is a key factor of the success of the Jorum initiative. In line with this openness, a new transition is ahead, in response to the changing digital demands of the education community: in September 2016 Jorum will be retired in order to refresh its OER approach. Over the coming months JISC will be testing and looking into the possibility of new services, as for example: bringing together existing resources and enabling educators to discuss, rate and use items within their own environments; or building forums and engagement spaces to enable users to share resources peer to peer. JISC will also explore the usage of a "Jisc App" and "Content store", a digital platform (still free to access), where users can blog, share and discuss challenges and solutions as well as a further education online academy.

The idea behind these different approaches is to develop digital literacy and confidence in using technology, bring together existing resources and allow crowdsourcing to promote the sharing of ideas and resource amongst the education and research community.

The 16,000 resources available through Jorum will be progressively moved to the new platforms and enabled to accommodate the new foreseen services.

Lessons Learned and Transferability Opportunities

In a transferability perspective, the main lesson learned in the Jorum case is the strong engagement with the education community (practitioners and trainers) and with intermediaries such as librarians and learning technologists. The engagement has been implemented through a wide spectrum of activities, each one tailored to the target audience.

The interaction with users has been fruitful also for developing an OER platform, which actually responded to the users' needs. The platform has been built around a socio–technical framework that allowed the flexibility needed to respond to the changing needs.

The openness of the platform is reflected by a multi stakeholder governance system: although managing a project whose team is split across two organizations and three geographical locations is a challenging endeavor, it has also brought many benefits, especially regarding the effectiveness of Jorum's reach out.

Finally, from a stricter technical point of view, multi–channels for uploading material have been an evident facilitator.