

QMP Item Banking at the University of Bradford

One of the aims of the Pathfinder project was to evaluate available options for Item Banking with Questionmark Perception. The intention was to find the resource that would best enable staff members at the University of Bradford in the first instance (and possibly ultimately colleagues at other institutions) to store test items in a secure place, organised, labelled with metadata and searchable, so that they could share items with colleagues. It was recognised that one of the reasons that staff were attracted to online assessment was to save time, so a collaborative approach to item creation was certainly seen as desirable.

Three main options were considered:

- JORUM, the free online repository service for teaching and support staff in UK Further and Higher Education Institutions, helping to build a community for the sharing, reuse and repurposing of learning and teaching materials.
<http://www.jorum.ac.uk/>
- SWAP (Sharing With Assessment Professionals): enabling members of Questionmark Communities to publish and access assessment content, a unique match-making and content-exchange program available exclusively to users of Questionmark Perception.
<http://www.questionmark.com/uk/perception/swap.aspx>
- Questionmark's own Shared Repository on the UoB low-stakes server installation.

1. JORUM.

After consultation with learner support service staff at the University of Bradford, an account was set up in JORUM, training was arranged at the Jorum training event at Bradford College in December. After looking at the available options and consulting with professionals in the CAA HE field, the following conclusions were reached.

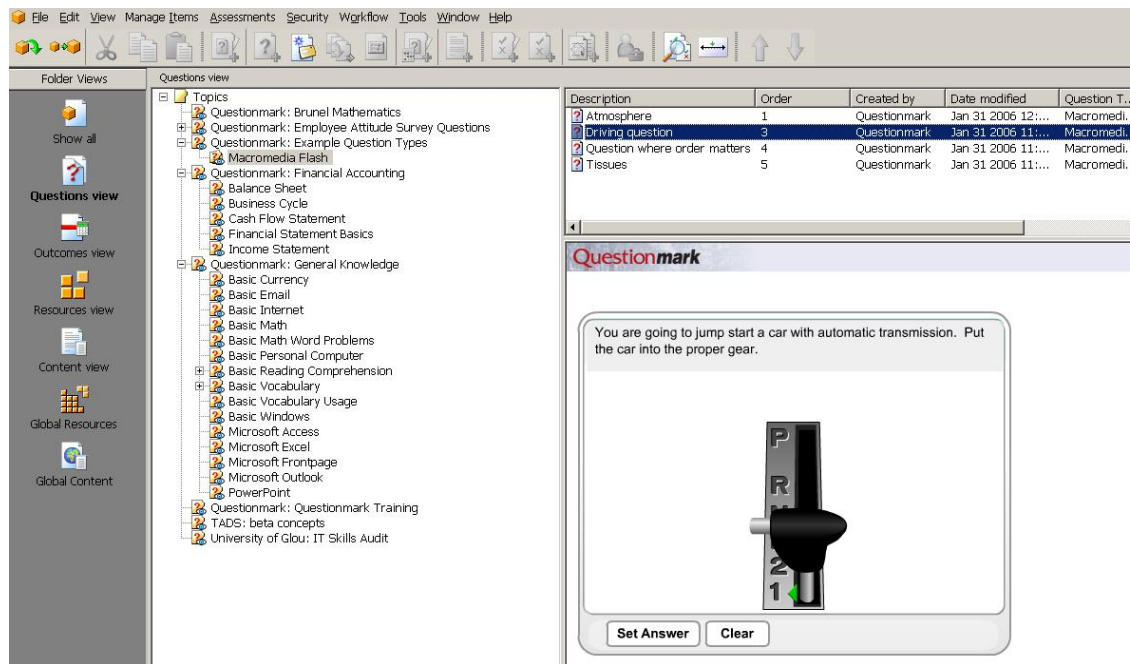
PROS – sustainable and affordable; available nationally for FE and HE; promoted by JISC; managed by EDINA and MIMAS; interoperable; good 'face validity'

CONS – the sector still seems tentative about JORUM; complicated licensing because of IPR; issues of ownership, power, control; could be more user-centred; issues over security of access to summative exam items

On balance it was decided to adopt a 'wait and see' approach with regard to JORUM. It is clear that EDINA are working hard to deal with some of the challenges currently being faced. However, until JORUM becomes more established, it would be risky to commit to using this as a repository.

2. SWAP

In theory, this sounded at first like a very good idea, enabling institutions using QMP to share questions and assessments. However, once we signed up as SWAP users and looked at the system, it became immediately apparent that the SWAP network was still very much in its infancy.



Looking at the complete list of available content, it was clear that other than one commercial media company that had entered a handful of items, the only content in the system were example placed there by Questionmark Computing themselves.

As with JORUM, it was decided to wait and see how this develops as a resource. If QM users start to use this on a larger scale, this can be re-visited in the future. Consultation with colleagues in other institutions indicates that this view is widespread. Obviously, though, if nobody takes the initiative, it will never get off the ground.

3. Questionmark Shared Repository

In QM Perception version 4 a repository contains the Perception database tables and the templates, graphics, resources and learning content used within assessments. Perception has all its database tables within one database referenced by one DSN within the repository. Similarly templates, graphics and multimedia files are all held within the repository. This greatly simplifies the process of managing material that goes into an assessment. There are two kinds of repositories, local and shared repositories. Local repositories allow access only by one person at a time, usually reside on author PCs, are for authoring use only, cannot be connected to Perception Server and use MS Access. Shared repositories allow access by more than one person at the same time, usually reside on a server, are for use both for authoring and for Perception Server, use a SQL Server, have security, so you have to login to access them and are accessed by TCP/HTTP over

the Intranet or internet. A Shared Repository Manager program lets you create and manage shared repositories and also manage the shared repository service and make configuration changes for it.

Now that Blackboard VLE and Questionmark Perception servers are communicating with each other through the BB-QMP Connector (implemented at UoB as part of the Pathfinder project), using the Questionmark Shared repository as an item bank became a viable alternative. Previously there was a major issue about who would manage permissions on the shared repository. If this were to be carried out manually, this would not be a scalable solution, and integrating the Student Record System (SITS aka SAINT) with QMP would be a major undertaking beyond the scope of this project. However, given that SAINT and BB are already integrated, if we could connect QMP and BB together, the module permissions from Blackboard could be used to manage permissions in the shared repository. This way, all staff members teaching a given module would have access to shared folders in the repository. It would also be possible to manage a limited number of folders manually if additional security was required (e.g. to create personal folders for staff).

This has proved very successful and will continue to be adopted for shared test items within the institution for the time being. Of course, this is not available to users outside the University, which will need to be dealt with in future, either by alternative means or through one of the solutions mentioned above.

4. Other Options

It should also be noted here that a new TQEF-funded project is underway on the School of Informatics at UoB, due for completion by late 2008/early 2009. One of the aims of this project is to set up a searchable and catalogued database of test items, saved in an interoperable format (eg QML or QTI XML), that could be used in QMP or with other systems such as Blackboard or WebCT Assessment tools. The aim is that these resources could be shared across institutions. The Pathfinder team will consult on this project and will follow its progress with some interest.