Discovery tools: looking into the black box

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As collections of electronic resources continue to grow, how do you make sure your users are finding it easy to access the material to which you have subscriptions? Many educational institutions now use a discovery layer for their electronic resources, but what happens when you're the team implementing it with no previous experience in that area?

The initial challenge

To perform effectively, it's become commonplace for library staff with electronic resources responsibility to also need an equal measure of IT systems knowledge. We e-resources managers here at Birkbeck College Library had the perfect chance to explore new IT territory when as a test site we combined three different platforms to implement our current discovery service.

Evidence of the problem

Our library's e-resources collection had reached a size so significant that we thought a discovery layer could improve the overall user experience. There were disparate access routes into our e-resources, and we wondered if a discovery layer might tie some of these together in one location, at least as a research starting point. Having tested one popular word recommender-based discovery tool alongside our OPAC (online public access catalogue), we found users confused by and avoiding it. Instead we opted to install the open source software, VuFind, which solved many of our concerns at the time. We successfully replaced our OPAC view with it, eventually abandoning the recommender tool. Users appreciated VuFind's straightforward appearance, and our systems team found it easy to work with.

When our library management team approached us to add a content discovery layer, we thought we would look at our current e-resource knowledgebase provider's (provider A) service. This service worked very smoothly, as expected, but pressure came to try a competitor's (provider B) product because the functions were more flexible. Our e-services and systems team had reservations about attempting to add a third provider when our current combination of services already worked well together. However, the assumption outside our team was that all discovery layers would be equally easy to implement. The challenge was set, and we were waved away with votes of confidence that we could make this trio of products from separate providers work together with no trouble.

Issues we faced along the way

Three library staff members from the e-services and systems team were assigned to the job, having

had experience of both providers' platforms, although no one had familiarity with the new discovery layer product. As we'd expected, the greatest challenge proved to be holistically learning the different products while predicting their behaviour with each other. Our role as a test site gave us plenty of latitude to work closely with provider B on a variety of issues. These included essential tasks such as:

- password protecting the discovery tool's search box
- loading provider A's knowledge base via an FTP (file transfer protocol)
- learning about the API between the discovery service and VuFind
- exploring the discovery product's functions and features, particularly our customised icons

Although we spent significant time in our team – and with both providers and the VuFind community – solving the technical problems, managing expectations in our library posed a further challenge.

How we resolved these issues

We'd built a discovery service that provided the desired search functions. We'd intentionally kept VuFind as our library catalogue software as it worked for our users, and provider A's knowledgebase as it worked well for our team. However, to our surprise some staff and users were disappointed the outcome didn't replicate provider B's native web interface. Fortunately, it wasn't difficult to demonstrate that provider B's live discovery product sat just behind VuFind via an API. It sometimes helped to explain that the discovery platform was working exactly as it should, and if it behaved unexpectedly now and then, it was just an instance where we hadn't yet found the correct way to communicate with it. Maintaining a dialogue with the VuFind community, providers of products, our users, and the discovery service itself remains essential to the project's continued success.

What we learned along the way

Reflecting upon the experience, if we could repeat it, we'd try these ideas. Although optimism and the ability to learn foreign concepts quickly are important, it's critical to communicate and manage expectations throughout. The first challenge is to clarify what your audience assumes about the result and be prepared to demonstrate potential actualities, offering compromises where possible. No one can fully predict outcomes, and that's only magnified when everyone is new to the situation and in a test environment. Further, any working service is one that's constantly under development, requiring enough staff and time to keep it in shape and not looking like a work in progress. Finally, it's humbling and a learning experience to discover how much is actually outside our control and even the provider's control at times.

Positive outcomes

The high point was the opportunity for our interdisciplinary teams to work together on the project. We created a working discovery service, solved problems for ourselves, as well as presenting solutions for future clients who envision a successful combination of VuFind and this discovery product.