Introduction

Following an expression of interest, Swansea University Information Services and Systems was invited on the 8th April 2014 to submit an application to the JISC-ARMA ORCID pilot by the 17th April.

While our application was subsequently accepted, and the project overall has been very successful, the short time period meant that some assumptions were made around the ability to deliver a sustainable, translated Welsh ORCID user interface that are yet to be resolved. However, the outputs of the project have been significant as described below, and the initiatives and activities that have resulted from participating in the pilot are firmly embedded in our operations moving forward.

Swansea University has been fortunate in regard to the level of technical and systems support made available to the project and the experience and knowledge of team members in the spheres of copyright and open access publishing.

On the technical side, the project lead, Alexander Roberts, is the manager of the Web Technology Development Team (Web Team), a division of Corporate Information Services (CIS) that is itself part of Information Services and Systems (ISS). The Web Team comprises 7 software developers and systems specialists and is responsible for creating, developing and managing a number of core management systems which include the Research Information System (RIS), Institutional Repository (Cronfa), University Website, BlackBoard E-Learning platform, and the Library OPAC amongst its responsibilities.

In the wider community one might observe that ORCID may be perceived of as being mainly relevant to Library and Subject Specialists. Such specialists are typically very familiar with the types of issues that initiatives directed at establishing authority files and persistent identifiers, such as ISNI and ORCID, are concerned with solving. However, such colleagues are often less familiar with the technical and operational elements related to enabling and supporting the adoption of new computing technologies, and issues centred on enabling interoperability between discrete systems. Example systems would include those that support learning and teaching, dissemination and management of research information, and other core systems such as HR and payroll. Swansea University operates a converged Library and Information Service (ISS) where technology and subject specialists operate in very close proximity to one another and ideas and solutions can be formulated in an open and supportive environment.
Given the fertile environment that exists between subject specialists and technologists, and the core capabilities of the Web Team in relation to managing research data, the technical aspirations of the project relating to developing and embedding ORCID within our information management systems were swift and relatively straightforward to realise.

With regard to subject support, project members experienced in managing copyright, open access publishing and relationships with publishers included Clare Boucher, Rebecca Kelleher and Steve Williams. With their combined knowledge concerning the issues facing publishers and research active staff together with the technical support from the Web Team the project was able to negotiate the various questions and challenges that came along with confidence.

**Outputs**

The major outputs of the project to date are as follows:

» Arranged a successful WHELF/WRN Repositories and Research Support Day at Swansea University in July 2014 that was attended by around 35 colleagues including representatives from all but one Welsh university, JISC, HEFCW and Kings College London. The event covered the changing face of research and research support including:
  - Open Access and REF
  - Research Data Management
  - ORCID and their benefits


» Posted information around Welsh mailing lists encouraging awareness of ORCIDs

» Embedded ORCID into Swansea University’s HR management system (Agresso Business World). Staff simply enter their ORCID into the system once and will subsequently have their ORCID displayed on their staff profile page, within the Research Information System and our public research repository

» Developed awareness and confidence among research support staff/librarians regarding registration and management of ORCID
Lessons Learned

This section includes both tangible and intangible lessons, experiences and impressions that by their nature are soft and not easily identified or communicated in some cases. Some of the findings are based on feelings and hunches (e.g. reasons for lack of engagement or interest in some areas regarding messages coming from central Information Services), whereas others are based on clear outcomes (e.g. increased ORCID signup). For the most the lessons relate to strategies and experiences surrounding engagement.

One of the overriding principles from the outset of the project had been to keep things as simple as possible. This had included strategies relating to producing concise guides to ORCID, only mentioning ORCID where relevant during discussions and providing simple mechanisms to allow staff to enter an ORCID into our information management systems one time only.

Engagement

The project began by attempting to ascertain which staff at Swansea already had an ORCID. We attempted this by a variety of means including contacting Research Coordinators and asking them to query their own staff, sending emails to Heads of Departments and College Heads requesting information and engagement, and during staff training and engagement sessions. Whilst we gained some information it was notable how little was forthcoming in particular in the areas of interest in the concept of ORCID and in supplying details of staff ORCID signup. It became apparent that more work is needed in raising awareness of ORCID among senior management of the University and Colleges. With this in mind we made a successful presentation to the Senior Management Team, but we are acutely aware that this should be a regular activity in order to keep ORCID on the agenda.
Despite our wish to keep things simple the project ran into hurdles concerning staff engagement at the individual level also. By virtue of the experience of subject specialists linked to the project we already knew that the whole area surrounding online publishing platforms (e-Journals, e-Books, Blogs, Institutional Repositories, etc.) versus traditional print publishing can result in a variety of experiences and attitudes among research active staff. In extreme cases the experience can either be hugely intimidating and confusing, or straightforward and ‘business as usual’. The middle ground is occupied by a combination of the two extremes. Experience and attitude seems to differ across the various academic disciplines, with the STEM subjects largely being more comfortable and experienced with engaging with online publishing mechanisms. The Arts and Humanities and to some extent the Life Sciences appear from the project’s perspective to be less familiar with disseminating their research online.

The project team therefore found itself frequently either attempting to engage with staff who already either considered themselves ‘expert’ in publishing online, i.e. via online journals, discipline specific repositories or with those that were overwhelmed by the whole concept. Both types presented real challenges in a) convincing those with experience that engaging with the project would result in some benefits to themselves and b) convincing those who were very hesitant that the experience could also result in tangible benefits. This meant producing coherent and concise guidance for both types that was easily digestible and informative. Those types in between the extremes seemed to be able to find their own way through the literature and online guides provided by ORCID and Swansea. We learnt two concrete lessons from this, 1) certain staff felt ORCID is not relevant to the them, and 2) a small minority of staff were scared to ask what ORCID is and what it can do for them.

Engagement at both senior management and individual level remains our largest challenge and where the majority of our efforts are being concentrated moving forward.

Engagement Methods
ISS employed a range of methods to disseminate information and engage staff and students with the concept and practicalities of ORCID membership including:

» Being physically available – face to face meetings in neutral environments such as coffee shops and local communal areas

» Traditional print media (flyers, posters)

» Email notices

» Blogging

» Social Media

» Including ORCID in any related research training sessions (open access publishing, managing copyright, etc.)

» Digital Signage – slides and moving presentations

Some of these techniques were designed to be highly visible (email, print media) and others were designed to be effective at a more unconscious level (training sessions, digital signage in coffee shops).
Opportunities and Possibilities

As stated previously, if the University (and the wider community) can create and communicate both the ease of ORCID membership and the tangible benefits of doing so there is a realistic possibility Swansea can attain high uptake rates among our colleagues. During the lifetime of the project the initiative has so far centred on the efforts of colleagues within ISS. In order to reach our ultimate aim of registering all research active colleagues (including academic, professional, support staff) it has become apparent that we require support and cooperation at every level from senior managers to post-graduate research students.

In order to foster such cooperation creative solutions need to be formulated including incentives and embedding ORCID engagement within existing workflows. Such workflows might include applying for research grant funding, completing professional development reviews, and PhD project applications. Incentives might include holding monthly competitions (college with most ORCID signups wins), and only promoting the research outputs of ORCID registered staff within internal publications, on websites and other internal communication mediums.

It is also clear that in reaching out to colleagues to promote the specific benefits of ORCID we are also potentially opening up permanent dialogues with areas of the institution that have previously been on the fringes of ISS influence and support. This represents a fantastic opportunity to engage colleagues in other areas of interest and governance such as Open Access Publishing and Research Data Management.

Without wishing to overplay a familiar aspect of widespread adoption of ORCID across the research-publishing ecosystem, the potential of disambiguating authors by associating ORCID iDs with staff holds huge promise in relation to our continuing development of Swansea’s Research Information System and its reporting capabilities across the enterprise. The benefits of reliably attributing works to individuals and creating associated performance data at the individual, departmental, college and even discipline levels, are well known. What may be less obvious are the very real opportunities which exist to support greater understanding through analysis and data mining techniques of inferred relationships between:

» Individuals
» Research communities and groups
» Institutions

Although there are obvious concerns relating to privacy through employing such techniques (as used by Facebook, Google, etc.), the real value of such information can also be useful in informing policy, relationships, and funding decisions both at the institutional, regional and national levels. For example, at present it remains a very real challenge to determine who is collaborating with whom and at what institutions unless formally recorded in joint funding bids. Through widespread adoption of ORCID this need no longer be the case (assuming all collaborative publications included the ORCID iDs of the collaborators), as it would become trivial to infer the relationships between individuals, institutions, regions, countries, etc. through a combination of ORCID lookup and resolution and other aggregation techniques (e.g. web crawling, email harvesting). Likewise
the potential to track the influence and impact of individuals and there individual/collaborative working has on the wider society is likely to be exploited in future by such means.

In addition to discovering the fruits of collaborations, the potential to track the careers of individuals is also very attractive in creating narratives concerning success rates of graduates, attainment, and dropout rates organised by gender, discipline and institution for example. Being able to analyse data such as the published output frequency, dates, and affiliations of individuals would for example allow an organisation to track an individual who may have registered for ORCID while a research postgraduate there and 15 years later became a tenured professor at a Russell Group university. Such a capability is a compelling argument for encouraging ORCID registration as early as possible within a career for the purposes of informing student recruitment and planning.

Of course, all of these other benefits can only be realised with high uptake of ORCID across all communities.