A Shared Leadership Approach to Change Management in Systems Projects

Meredith Mooi and Beth Crawter
Library, University of the Sunshine Coast

In 2012 the University of the Sunshine Coast (USC) Library embarked on a feasibility project as part of an identified systems roadmap to evaluate both traditional library systems and the new library services platforms coming onto the market. The outcome was a strategic decision to move towards library services platforms and keep a watching brief as these developed further over the next 12-18 months. In 2013 a second project in the roadmap focussed our attention on the evaluation and implementation of a library resource discovery layer. The subsequent Stage Three project (library services platform evaluation and implementation) is currently underway.

These projects have provided opportunities to consider approaches that would build capacity and develop staff in parallel with core project tasks. A key consideration was ensuring staff capability to deal with systems complexity and technological change. Taking a devolved or shared leadership approach established and promoted a culture of team learning, sharing, collaboration and contribution, and encouraged staff to take responsibility for their own learning, reflective thinking and knowledge building.

The evolution and formalisation of this shared leadership approach has strategically positioned USC Library to better manage change during the projects identified in the systems roadmap, and has resulted in quality decision-making and project outcomes. This paper outlines the approach taken to change management leadership, the processes used to establish and maintain the cooperative learning culture in support of systems projects, and the challenges dealt with along the way. It also provides a summary of lessons learned for its further evolution.

Introduction and background

In 2013 the University of the Sunshine Coast Library undertook a project to evaluate, select and implement a library resource discovery layer which promised a Google-like search experience of a single search box and faceted, relevancy-ranked results based on central metadata indexing. The project was the second in a series of three, forming the strategic systems roadmap that would move the Library towards full library system replacement. Its primary goals were threefold:

- to evaluate resource discovery layers via a formal tender process;
- to determine the value of implementing such a system; and
- to select and implement the most viable system for our environment.

The project team of seven, led by the Library Systems Coordinator, comprised the Library Manager, Library Resources Coordinator, Information and Research Services Coordinator, and three faculty librarians.

As the Library progressed through the systems roadmap, the projects would become increasingly complex and planning for the Discover project highlighted the need to address staff development as part of the process. This resulted in two additional goals for the Discover project:

- to identify and implement a leadership approach to change management that would provide a framework for staff development; and
- to build capacity and staff capability through the development of a supportive learning and knowledge sharing environment.

The first half of the paper outlines the establishment of the Discover project, the selection of the leadership model, and how the leadership processes and team framework enabled staff development and
facilitated change management. In the second half, we describe how the project and its leadership approaches affected the Information and Research Services (IRS) team (comprising the Coordinator, five Faculty Librarians, two Reference Librarians and a Learning Support Librarian); in particular how staff capacity developed and has evolved and continued to build beyond the project to becoming an operational norm.

**Project initiation and approach**

**Critical success factors**

Consideration of the staff development requirements as part of the initial project planning highlighted a number of critical success factors, mainly around:

- developing a sound understanding of discovery layer technologies, including their strengths and weaknesses;
- creating the right conditions for learning, contribution and collaboration;
- building trust for inclusive discussion and decision-making; and
- staff ultimately taking ownership of the discovery system to ensure its ongoing maintenance and development.

Project staff needed to understand the complexity of discovery layers including the sources of metadata and coverage, the different relevancy algorithms and their effect on search results, as well as the capability of discovery layers to technically integrate with our existing library system. Understanding these concepts would allow project staff to effectively evaluate the systems but also highlight their limitations.

The literature review of discovery implementations highlighted the need to address any mistrust of librarians towards discovery layers. A telling comment from librarians at Edith Cowan University (ECU) who were early adopters of Summon discovery in 2009, was that they did not trust it because they did not know how it worked. (Howard & Wiebrands, 2011, p. 7).

Howard & Wiebrands (2011, p. 10) also described how they had implemented Summon thinking that their librarians would embrace the technology but found that staff were not convinced about the usefulness of discovery layers. ECU librarians were also displeased that the system had been foisted upon them without much consultation. All of these issues stemmed from the lack of inclusion of the librarians in the evaluation and selection process, and so we were determined to learn from the missteps of Edith Cowan’s initial implementation of Summon.

Early discussions amongst USC librarians during Information and Research Services (IRS) team meetings reflected ECU’s experience, i.e. our librarians felt varying degrees of scepticism about the value of discovery layers, especially in terms of content coverage and the reliability of searching and results.

By emphasising the learning component of the project approach, our librarians would be expected to understand the technicalities of the system so that they could determine its value for themselves, develop solutions around system limitations and thereby build trust in its capabilities from the very beginning. Being included in the selection and implementation decision-making processes would also ensure that the system would be embraced by the team who would be using it on a daily basis and teaching it to end-users.

Through our focus on knowledge building, USC Library hoped to encourage librarians to ultimately take ownership of the system.

**Theoretical foundations**

The theory underpinning our thinking approach was adapted from Debowski’s (2006, p. 46) Five Ps of Strategic Knowledge Management model. Debowski (2006) defines the five key areas as Planning, People, Processes, Products and Performance; however we made a conscious and deliberate decision to
place People at the centre of our project approach. This is reflected in Tamkin’s assertion that “[p]eople are not one priority among many, but the one that really matters.” (2012, p. 93)

Having this central focus informed the selection and development of the project team, the development of a project framework to enable learning and knowledge building, and also defined the devolved or shared leadership approach that would achieve both the core project goals as well as the staff development outcomes we desired.

Table 1 (below) provides a summary of the Five Ps approach to our project planning.

**Table 1.**
*Five Ps Approach to systems project planning, adapted from Debowski (2006).*

<table>
<thead>
<tr>
<th>Critical Success Factors</th>
<th>USC Approach &amp; Expectations</th>
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<tbody>
<tr>
<td><strong>People</strong></td>
<td></td>
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<tr>
<td>Participant commitment</td>
<td>Responsibility, expectations for learning and sharing, stepping up, listening to differing points of view, accountability to team and each other</td>
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<tr>
<td>Sharing culture</td>
<td>Modelling knowledge sharing rather than knowledge hoarding</td>
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<tr>
<td>Leadership values</td>
<td>Shared leadership – taking the lead in areas of expertise, supporting others through knowledge building, learning, crisis, conflict</td>
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<tr>
<td>Communication</td>
<td>Participative discussion and decision making, consultation and consensus</td>
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<tr>
<td>Development (staff, skills)</td>
<td>Trust, respect, empowerment</td>
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<td></td>
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<tr>
<td><strong>Planning</strong></td>
<td></td>
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<tr>
<td>Defined knowledge needs</td>
<td>All team members needed to understand discovery layers and how they worked, critical for Central Index metadata discussions and evaluation</td>
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<tr>
<td>Systems and processes</td>
<td>Systems roadmap, risk assessment of selecting discovery layer that we might need to move away from in 18 months-2 years’ time</td>
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<tr>
<td>Long-term perspective</td>
<td>Skill-building for future library system replacement project (discovery component), embedding skilled staff in new work teams for library system replacement project</td>
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<td></td>
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<tr>
<td><strong>Processes</strong></td>
<td></td>
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<tr>
<td>Strategy</td>
<td>Message that principles of quality and best practice were important – discovery layer specifications and scoring</td>
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<tr>
<td>Principles</td>
<td>Utilisation of USC project policies and practices – project planning, reporting, official tendering process</td>
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<tr>
<td>Processes</td>
<td>System specifications, scoring, site visits and evaluations</td>
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<td>Practices</td>
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<td>Messages</td>
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<tr>
<td><strong>Products</strong></td>
<td></td>
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<tr>
<td>Implementation</td>
<td>Discovery layer implementation including enhancements eBook widget, database recommender, facet configuration</td>
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<tr>
<td>Core knowledge</td>
<td>Multiple custodians of discovery layer system to ensure ongoing maintenance and development</td>
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<tr>
<td>Ownership</td>
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<tr>
<td><strong>Performance</strong></td>
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<tr>
<td>Measurement structure</td>
<td>Project review</td>
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<tr>
<td>Core competencies</td>
<td>Project skills, systems analysis skills, leadership skills, coaching, mentoring, continuous learning</td>
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<td></td>
<td>Usability studies</td>
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<td></td>
<td>Resource usage analysis</td>
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<td></td>
<td>Discovery layer usage statistics, comparative analysis of interface usage (catalogue, database page)</td>
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Core knowledge management (KM) principles were embedded in our capacity building approach, namely:

- learning from external sources;
- learning from mistakes – ours and others;
- having a strong focus on knowledge sharing rather than hoarding; and
- socialising knowledge through discussion and debate.

Where we deliberately deviated from KM theory was in the area of ‘champions’. The Library Systems Coordinator/Project Manager was not necessarily always the expert and it was clearly stated that once implemented, the system would not ‘belong’ to the Library Systems team.

All project staff were expected and encouraged to learn how discovery systems worked so that the critical success factor of system ownership was achieved by creating multiple custodians of the selected system. As learning evolved throughout the project, different individuals might gain understanding before others and we wanted them to be able to share that knowledge with team members and act as guides along the change path.

Creating the right conditions – Shared leadership and team diversity

Achieving staff development and capacity building through systems projects requires the right framework to be established. By creating the right conditions (Slantcheva-Durst, 2014, p. 1019) through a combination of shared/devolved leadership and team diversity, we aimed to engage and empower staff in their own individual, as well as team, learning.

Shared leadership is called for most when project tasks are highly interdependent, require a great deal of creativity, and are highly complex. (Tamkin, 2012; Pearce, 2004) Pearce describes shared leadership as that which

…occurs when all members of a team are fully engaged in the leadership of the team and are not hesitant to influence and guide their fellow team members in an effort to maximise the potential of the team as a whole. (2004, p. 48).

At different times different individuals act as leaders or as followers (Drescher et al, 2014, p. 771) and this, combined with team diversity, allows team members to share information, knowledge and experiences and to build on each other’s ideas (Hoch, 2013, p. 546). It also ensures that different perspectives and opinions are voiced, considered and discussed.

To achieve diversity in the USC Discover project team, staff were selected based on experience, knowledge, role and HEW level. Some staff members were also specifically chosen in order to build their knowledge and skills, as acknowledged by one participant:

… [because I’ve] previously worked with a web-discovery service and to gain experience working on a project.

One staff member was included based on her experience of a less than successful discovery layer implementation at another library. Her input added value to the team’s discussion about ensuring librarians’ understanding of the product. As a result her experience of our implementation was very different:

Compared to past experience where I was not involved in any decisions regarding the product, testing, and implementation I felt the decision-making behind Discover was fair and open.

Another selection criterion was cross-team representation, although this was difficult to achieve because of the discovery layer impacting more on the IRS team of librarians rather than on circulation or acquisitions staff. This was overcome by ensuring that one of the project team members acted as a communication channel between the project team and those staff.
Creating the right conditions – Team expectations, culture and trust

From day one of the project the Project Manager (PM) clearly stated the expectations of commitment, contribution, engagement, responsibility and accountability for all team members. Learning was emphasised for all, including the Project Manager, and the clear acknowledgement of this provided one foundation for information sharing and discussion. A strong focus on learning and inclusive discussion was consistently maintained throughout the project team meetings to role model and reward knowledge sharing rather than knowledge hoarding.

It was also recognised from the outset that the team foundations of trust and respect underpinning contribution would need to be supported by creating a level playing field in which the different ideas and opinions of all were treated and valued equally. To achieve this, team member equality over HEW level or experience was clearly stated and then reinforced through a team values exercise to establish the team citizenship behaviour (Pearce, 2004, p. 51) for the group.

Each member was asked to nominate three statements that reflected how members wished the team to operate and how members should treat each other. These statements were then collated to become the team ‘house rules’ and were laminated so they could be referred to by any team member if/when discussions became heated or individuals/factions dominated.

Shared leadership in action

Shared leadership required the PM to commit additional effort and time to achieve both the project goals and the identified staff development goals. The former informed the latter and a constant balancing act was required to plan and direct the activities of both goal streams. A shared leadership approach also calls for the ability of a project manager to know how to mix leadership styles appropriately, when to provide task direction and guidance, when to step back to empower staff, and when to judiciously intervene if required (Pearce, 2004, p. 54).

The PM established a process to flag topics for research and discussion, leading up to and aligned with each task of the project schedule. It required the PM to constantly stay one step ahead of the learning process in order to direct team members to consider options and implications, and feed ideas back to the project team to ensure task completion and timely decision making.

The PM monitored team discussions for understanding and provided further detail as required. Project team members were encouraged to seek clarification and there was no such thing as a ‘dumb question’. It was acknowledged from the outset of the project that difficult concepts might be confusing for other or all team members, and the culture of trust that was established ensured that members could ask for help without prejudice.

The PM provided detail about technical concepts, e.g. metadata and indexing, and at various times other team members led discussions of critical considerations such as experiences of discovery implementations at other libraries, interface design, usability studies and training approaches. In this way, shared leadership and team diversity added value to our selection and implementation process as it enabled team members to highlight key topics and ensure that these were embedded in discussions.

A strong sense of collegial trust grew as different members provided input in their areas of expertise, and this was also reflected in the increasing trust in the process. Two comments from members describe what worked well:

The management of meetings, the equal opportunity to discuss and argue points about the project, the product, and the needs of the community we were representing.

Good to have the space, time and openness to really discuss issues thoroughly. Resolution able to be reached although there were differing opinions on certain aspects.

Discussion about our Request for Tender (RFT) specification weightings was particularly robust and further reinforced the technical understanding of discovery systems among all members of the team. It
also promoted and developed skills in consultation, listening, reflective thinking, consideration of other points of view and consensus building:

We had to examine [systems] carefully and really try to understand how they work. Being on a project team forces you to be more careful at examining the pros and cons of systems. Everyone worked together cooperatively.

The true value of our shared leadership approach became evident whenever the project team experienced a knowledge crisis point that required intervention from the PM and/or cooperative team leadership to get the project back on track.

**Overcoming challenges**

The team encountered two situations where technical complexity overwhelmed understanding, requiring the PM to investigate and intervene. In the first instance project team members became confused when evaluating the vendor responses. The PM identified that the cause was the complexity of the metadata. Trying to compare metadata coverage was not as simple as it might have been because each of the vendors presented the information differently. It was a case of ‘apples and oranges’ rather than ‘apples and apples’.

The PM convened a special project team meeting to go back to the basics of vendor metadata provision, coverage and licence agreements. The team went over this a number of times until understanding was reached. The team then reviewed the vendor metadata spreadsheets and came up with a simple set of guidelines for dealing with each list in order to establish some comparison points. This enabled team members to separately complete their evaluations and scoring.

The second crisis point came during implementation after USC Library had selected EBSCO EDS as its discovery layer and branded it ‘Discover’. Implementation discussions extended beyond the project team to include all IRS librarians.

The team had identified two interface enhancements that would add value for end-users. The LibGuides and database recommender widgets performed searches based on user search terms, but required a great deal of configuration by the Library in order to work effectively. The team needed to understand how each widget used defined tags, as well as the underlying metadata coverage limitations to determine which databases needed to be included in the database recommender configuration.

This project task was derailed when the librarians found it difficult to concurrently consider the two widget configurations. The PM recognised that the problem was caused by confusion about the different use of tags and terms. The PM again convened a special session to discuss the issues and provide further explanation about the way the widgets worked, but in this case the intervention only partially succeeded.

It was not until the IRS team discussed the difficulties further in one of their team meetings that one of the librarians grasped the concept and began describing it to the other librarians in a way that related the new ideas to existing concepts that the librarians were already familiar with. It was significant that she had not been part of the project team, but she was able to step up and lead the librarians through the complexity because the projects’ shared leadership approach had expanded to the IRS team and enabled it to happen.

A number of potential risks are introduced when shared leadership is implemented, including the potential loss of control and the alternate possibility that it is not embraced by the team members. USC Library identified and managed these risks through planning, defining a clear purpose, establishing a structured framework based on inclusivity and trust, and strong PM leadership and perseverance. The outcome has been an extremely successful discovery layer implementation, but more importantly it has resulted in the staff development that we desired.

This is clearly demonstrated in the librarians’ increasing commitment to learning and their growing capacity to deal with technological complexity through knowledge sharing.
Team learning for change

The Information and Research Services (IRS) team at USC is a small team of eight librarians with diverse skills and backgrounds, a 30 year age span and high levels of professional independence. The team:

- manages the Library’s web presence;
- creates online learning resources;
- plans the delivery of the Library’s online collections; and
- delivers the Library’s information literacy training.

Any interface changes made by the Library or the University directly impact this team and the implementation of the Library discovery layer fell largely in the team’s scope. However, the implementation required the team to develop a technical understanding of discovery layers which was beyond our primary focus of training. The team not only faced a complete change in their traditional practices, but also were required to collaboratively build and implement the new system, with no reduction in their regular workload.

The implementation of the discovery layer provided the impetus for the IRS team to transform itself with:

- increased technical understanding;
- capacity building through shared leadership; and
- greater adaptability to change.

Those with traditional leadership roles, i.e. the IRS Coordinator and the Library Systems Coordinator (as Project Manager), repositioned themselves to provide structure, support and guidance to ensure the team was heading in the right direction, but they did not manage the process. That was left to the team.

Upon implementation, those who had been on the project team acted initially as guides to the new system, and provided reassurance to members of the team who were less confident with change. They were not identified as drivers of change or change ‘champions’. At first they were apologists for system limitations, and then the initial troubleshooters for problem solutions, but once system knowledge capacity equalised they all became part of the cohesive team working on the implementation.

Working towards a goal gave individuals the incentive to perform a variety of roles from coach to expert, learner to teacher, disruptive sceptic to information collector. Shared leadership offers individuals the opportunity to display their skills and capabilities. This maintains the engagement and enthusiasm of team members and from an institutional perspective, provides for a dynamic organisation.

The IRS team had watched their colleagues working through the tendering and decision-making process and had seen the commitment involved. They trusted that the best decision had been made and were excited about the opportunity to participate in designing the new interface. Faculty librarians immediately began experimenting to see how the discovery layer would perform for the different categories of end-users they worked with.

The results were discussed informally. As discoveries were made, there was spontaneous sharing of information amongst the team who tested it in their own context and questioned, explored and expanded each other’s knowledge. Problems were investigated within the team and only escalated to the PM when no resolution could be found.

Team meetings were a formalised opportunity for reflection, to relay and escalate information, to identify problems and ask for clarification. The team might ask for the PM to attend if they needed instruction, or she would request attendance if she suspected a process was being derailed.

They are a better team – We are a better team

Shared leadership has given Information and Research Services a stronger sense of their capability as a team. Exchanging knowledge and exploring solutions is now an embedded norm. The team makes use of
a range of abilities, some of which, such as mentoring and morale-boosting, are undervalued during traditional top-down change planning.

Over the past two years, with very little anxiety or resistance, we have moved from GroupWise to Outlook, adjusted to Microsoft Lync, implemented online rostering and calendars in our team, configured the discovery layer, and are now embarking on a new library system. The techniques of becoming expert, taking the lead and sharing knowledge that were developed through the implementation of the discovery layer enabled the team to transition relatively smoothly through these technological changes.

It has not all been plain sailing, but the team continues to learn about each other along the way. Some cannot grasp the concept of shared calendars in Outlook. Some cannot understand Lync. The difference is that now individuals are willing to ask for help and there are others in our team who can give that support, repeatedly if needed. Even team members who elected to engage at arm’s length have benefitted from the shared expertise.

Team members’ confidence and empathy developed as relationships within the team were strengthened, and trust increased. They are now more comfortable if required to take responsibility, to step aside or to ask for support. While they collaborated on tasks, the social culture of the team also developed. They have learned to moderate each other, tolerate each other and work to each other’s strengths. The team has learned to constructively and respectfully disagree.

The cynicism which often accompanies change has been minimal. The entire IRS team was aware of the limitations of the discovery layer and worked together on solutions and workarounds. The team now knows the value of metadata, and a member of the team took responsibility for the revision of all of the databases information and access pages. All members of the team understand the restrictions facing web designers in a university setting and make informed contributions to website changes.

Both leaders and teams can feel challenged by the loss of familiar hierarchies when shared leadership is initiated (Pearce, 2004, p. 51). The status/age hierarchy of the IRS team collapsed and new roles evolved, replaced by a horizontal knowledge space where expertise is acknowledged and information dispersed. The team has moved from a collective of independent operators to a unit with a common focus.

The time previously spent ‘managing’ the team can be more gainfully allocated to reflection, review, planning and development, all of which will be informed by the skills, capabilities and weaknesses the discovery layer implementation revealed.

The University is now implementing Microsoft Office 2013 and is running weekly workshops.

Are we all going to the same training so we can work with each other when we get back?

That comment indicates a level of capacity to cope with change that we did not have three years ago. The team is approaching the implementation of a new library system, something that will change every aspect of their working life, with confidence and anticipation rather than fear and distrust – because they know they will have the opportunity to be part of the process.
Outcomes and lessons learned

Achievements

- Librarians have embraced and taken ownership of Discover and pro-actively maintain its development.
- Librarians understand discovery layer technology and this is demonstrated in their troubleshooting and problem reporting:
  - Instead of asking “Why isn’t this search working anymore?” they ask “Has EBSCO changed the relevancy algorithm? Do we need to adjust our configurations?”
- The shared leadership and team diversity approach encouraged staff to learn:
  - “Build better relationships with other Library team members. Good to look at business processes and how they might be improved as part of the changeover. Good to improve professional knowledge of industry environment.”
  - “I learnt the value of being a representative of the user group rather than a member of a decision-making only group. I learnt this through reporting and gathering feedback from my team outside of the project on items that could be discussed…”
- Commitment to collaborative learning has expanded beyond the project team to become embedded in the IRS team as an operational norm. Staff are better able to cope with technological change:
  - Office 2013 deployment and training “Are we all going to the same training so we can work with each other when we get back?”
- Inclusive discussion and decision-making is valued and promotes contribution:
  - “I thought the decision-making process was equitable taking into consideration all concerns and issues raised within the team. All team members were listened to and their opinions sought and discussed.”
  - “I learnt the importance of strong leadership of the project team. Strong leadership meant that the project moved forward in a timely manner and all team members were regularly encouraged to actively participate in decision making process.”

What we could have done better

- Documenting the shared leadership approach as it evolved
- Being more specific about roles – providing more guidance for staff to manage responsibilities and processes once they were empowered via the shared leadership approach
- Providing more guidance on the basics – time management, managing workloads, scheduling
- Managing expectations about project team involvement – participants and non-participants
- Reiterating project team values at the start of the implementation phase
- Engaging existing work teams with the project team values

Future developments and evolution

The shared leadership approach to systems projects continues to evolve at USC Library. We have adapted and expanded it to apply it to our current library system replacement project, which has presented a greater degree of complexity than the Discover project.

Project team diversity is critical for the current project, as representation is required across all Library staff and from all work teams.

Staff capacity building is still the central focus. Again, some project team members were specifically selected in order to build their knowledge and skills.

For the implementation phase, we are planning to create a number of work groups so that all Library staff are involved in the system learning, implementation and configuration decision-making. Members will be selected based on experience, knowledge, role and HEW level. The Project Manager will run the team values exercise for each workgroup to establish the house rules, and articulate team expectations.
Capitalising on the staff development achieved during the Discover project, we will also embed the Discover project members and the IRS librarians across the new project work groups, to expand the shared leadership approach through role-modelling and example.

Further strategic benefit has been achieved in being able to task and rely on the IRS librarians to take the lead on the implementation of the new library systems’ discovery layer. Based on their sound understanding of discovery technology the librarians will coordinate the consultation sessions and collaboratively build this component of the new system.

**Conclusion**

A strategically developed shared leadership model has provided the framework for change management and capacity building through two systems projects at USC Library. Planning for staff engagement from the outset led to confidence in the change process and increased technological understanding. The tangible result has been the high quality evaluation, collaborative development and effective implementation of the discovery system. The establishment and promotion of a culture of learning, collaboration and contribution has resulted in teams which have the capacity to learn, adapt and engage, and has positioned USC Library to better manage technological change.

**References**


**Corresponding author:** Beth Crawter, ECrawter@usc.edu.au


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