# Final Project Report

# For

# Enhancing the sharing of learning and teaching resources at UTAS and beyond

http://www.utas.edu.au/tilt/projects/sharing-learning-resources-project

https://elibrary.utas.edu.au/lor/

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Project Team

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# Executive Summary

The 2013 TELT White Paper on Technology Enhanced Learning and Teaching endorsed by the University of Tasmania provides a five-year vision for the university. At its heart, is an examination of how UTAS can use technology to extend its influence and contributions to teaching and learning locally, nationally and internationally through the sharing of learning and teaching resources. Principle 5 of the White Paper recommends the development of a high quality learning object repository.

The project's rationale were to establish a culture of sharing learning resources through community development and to develop a Learning Objective Repository (LOR) for production, use and discovery, as these are necessary elements for developing and maintaining a high quality LOR. Sharing learning objects across the University provides for an economy of scale in the production of teaching resources, quality improvement and the opportunity for communities of teaching practice to develop. However, to make learning objects available to various user groups requires active management of object rights, as well as cultural change within the university to encourage the sharing of teaching resources.

The project delivered on all stated deliverables. A repository framework for sharing learning resources has been developed in consultation with key stakeholders including Faculty, Library, and ITS. The framework includes metadata schema, rights management scheme, quality assurance processes, procedures and information to guide users. The repository can potentially support teachers in providing high quality learning experiences to students. Additionally, it is a powerful tool to make the work of academics more efficient and innovative. According to the project evaluation, Champions would like to have the repository as an ongoing resource for teaching and learning at the University of Tasmania. Therefore, a sustainability plan is needed in order to maintain and continue development of the repository.

The main project activities were:

- A workshop delivered to the project Champions
- Key meetings held with the Steering Committee
- Development of a repository framework for sharing learning objects (including supporting documentation)
- Development of a system that enables Peer Review of Learning Objects (PRoLO) (including supporting documentation)
- Usability test of the repository (including supporting documentation and information gathering)
- Dissemination activities
- Project evaluation

# Contents

# Project Outcomes

Project achievements are presented below. Each deliverable is discussed in detail, including adjustments made by the project team and recommendations given by the participants.

## Deliverable One:
## Identify potential LOR champions (across different Faculties), and with their assistance establish a community of practice for the sharing of learning resources through the UTAS LOR within each Faculty.

***Status: Achieved***

The project team identified and subsequently invited six champions from different Faculties within UTAS. All of them accepted the invitation and attended the first champion workshop/information session held in Hobart in Dec 2014. During the workshop, all champions could articulate distinct reasons for taking part in this project and for use and application of LOR in their own (and colleagues) teaching context.

### Issues

One of the main issues relating to Deliverable One was participant engagement and participation in the project. Unfortunately, one champion withdrew from the project due to an increase in workload. Heavy workload was also a problem identified by all champions as a barrier to their further engagement in the project. As a result, there was minimum contribution to the repository during the life of this project.

Another issue that could have impacted on participation was the fact that the budget for the second year of the project had a reduction of 30% ($11,497). Initially, each champion was offered a small financial contribution to participate in the project ($1,500) from the beginning (Sept 2014) to completion (Dec 2015). Participants only received financial support for their time spent in the project during the period of Sep to Dec 2014 ($500); the financial support stopped in 2015.

The fact that the project team couldn't guarantee continued support for the developed repository service after the completion of the project was also an issue for some champions. It made it difficult to justify the effort involved in contributing to the scale they would have liked.  A majority of champions discussed that they would have liked to contribute many cross-disciplinary teaching modules for sharing across Schools and beyond UTAS.

Team members' expertise was fundamentally important for the success of the project. During the life of the project we welcomed additions to the team for brief periods (see Resources).  The Project Manager

took maternity leave for the last 6 months of the project and could not be replaced with a dedicated appointment due to project funding cuts and restructure of the Division of the DVC Students and Education. The major impact of this on the project was a reduction in communication between the project team and the participants.

## Lessons learned

- Difficulty in getting champions to contribute to the extent desired argues for need to have dedicated LOR manager who can drive engagement, support process, quality assurance (QA), and answer technical questions.
- The repository needs to have ongoing support from the university senior executive members to be effectively adopted in learning and teaching. Users would be more confident that their resources would be permanently available to all for use and reuse.
- For future projects and even a possible continuation of this one, the team needs to make sure that the project activities and milestones are aligned with the university teaching calendar cycles (lectures, marking, and summer schools) to maximise participation.
- Also for future projects, in the case of losing key team members, such as the project manager, this should be replaced as soon as possible to give continuation to the project activities and keep communication flowing amongst all stakeholders.

## Deliverable Two:
## A repository framework for sharing learning objects that is implemented on the UTAS LOR.

***Status: Achieved***

Extensive research and development was undertaken in developing a repository framework that met the needs of the Champions and other users of the repository.  A review of numerous metadata schemas including Vetadata (Schema for the Australian vocational education and training (VET) sector), CanCore (Canadian standardised approach to Learning Object Metadata) and ANZLOM (Standardised Australian and New Zealand Learning Object Metadata Schema) was undertaken by the project team including consultation with the ACODE community.  The project team also consulted with the repository vendor Pearson and the University of Southern Queensland (USQ) in devising the final metadata schema implemented on the repository. Formative evaluation of the project also led to schema refinements to licensing and relational metadata elements as well as the insertion of elements relating to subject, peer review, and learning outcomes.

Usability testing was performed by a set of participants who have never used the repository before. The participants were asked to carry out a set of tasks in the repository relevant to learning and teaching activities.  Further refinements were made to the repository based on the results of this testing.

### Issues

The repository's functionality did not allow for the peer review process to be conducted within the repository. This led the project team to provide an innovative solution which is explained under Deliverable Three.

The project team were unable to resolve a search issue with the repository where the general search functionality does not allow a search to be conducted on a creator's name. This issue was raised by the project team and Champions.

### Lessons learned

- Further development time was needed to enhance the repository's search functionality allowing resources to be retrieved by searching for a creator's name.
- The team must liaise with the repository vendor to ensure enhancements are added to subsequent versions.

## Deliverable Three:
## A document containing some guiding principles on how sharing learning resources through the UTAS LOR can contribute to TPEs

***Status: Exceeded***

Instead of developing separate and distinct documentation, the project team created and organised all information and documentation related to collecting evidence for the TPEs into the repository as "help" and information available in pop-up windows. Participants have found that the information available to them within the repository was helpful and clear.

However, the project team have not only provided information on how sharing learning resources could be recognised as TPEs, they have developed a system that enables Peer Review of Learning Objects (PRoLO). PRoLO is a simple, automated and quick process developed for this project to ensure accuracy, currency and quality of learning objects available in the repository. Through this process, resource creators can

collect evidence that could be used towards their TPEs. Participants found this feature of the repository innovative and attractive to repository contributors.

## Issues

Initially, for some participants, peer review of learning objects was a difficult concept to grasp. This was because some of them didn't regard peer review of teaching as having the same rigour/value as other more traditional forms of peer review (e.g. Blind review in scholarly journals).  After some adjustments to PRoLO and subsequent requests for champions to trial it, the whole process was seamless.

At the moment, the repository only allows UTAS staff and students to review learning objects. This is a problem as creators of resources sometimes would not have other discipline experts within UTAS. Having external reviewers would also enable resources to be reviewed multiple times to meet national and international standards.

## Lessons Learned

- The repository should allow reviewers from other national and international institutions to engage in PRoLO process. This will have licence implications for the repository.
- There needs to be vigorous promotion and dissemination of the PRoLO process, so that academics can better understand the benefits of engaging with the repository; sharing and improving the quality of learning resources and being recognised for doing so.

# Deliverable Four:
# A practical guide on how using the LOR to share learning objects can enhance curriculum offerings at UTAS

***Status: Achieved***

As with Deliverable Three, the project team developed a separate practical guide on how to share learning resources through the repository. The project team created and organised all the information as "help" and additional information available in pop-up windows. Participants liked this approach and found that the information available to them within the repository was well organised, helpful and clear. The team also included web links to resources about curriculum design and learning and teaching, available within the Tasmanian Institute of Learning and Teaching (TILT) website to assist participants to enhance their teaching practices by using resources available in the repository.

## Issues

The main issue faced by the project team in relation to this deliverable was to develop clear and helpful instructions on how to use the repository, how to differentiate learning objects from learning resources, and how and which license to apply to the resources uploaded.

During the first full day workshop held in Hobart in Feb 2015, participants showed concerns and lack of knowledge on how to apply the right license to some of their resources. The team then acted on the feedback and requests from the participants by including and developing additional information about copyright, open and closed licenses.

## Lessons Learned

- Participants recommended that the project team should deliver a series of workshops to the broader university community to build capacity and raise awareness about the repository, as well as how to apply the most applicable license to their resources.

## Deliverable Five:
## Develop and deliver two full day workshops with LOR Champions at Campbell Town, and at least one half a day workshop in Hobart and one in Launceston to LOR champions and broader university community. Further workshops and consultations with university stakeholders will be organised as needed.

***Status: Adjusted and Achieved.***

This deliverable has been adjusted to fit within the project revised budget and champions' increased work commitments mostly in the second semester 2015. The project team, however, has successfully delivered one full day workshop held in Hobart in Feb 2015, where all six champions attended.

Instead of full day workshops and consultations, the project team decided to promote and disseminate the project at key learning and teaching internal university events, such as Teaching Matters, as well as at key national conferences. Therefore, the adjustments of this deliverable enabled the results and progress of this project to be successfully disseminated at institutional and national levels. Please see the dissemination activities section below for further information.

## Issues

As discussed, the project's progress has been impacted by a reduction in project funds and loss of personnel during the life of the project, as well as an increase in the champions' workload. These issues have also

limited the opportunities to meet with champions and to deliver the workshops suggested in this deliverable.

## Lesson learned

- Project participants would like to keep informed of the progress of the repository, updates about new features, and future plans to keep it ongoing. An email from the project leader to the champions from time to time would keep them engaged with the repository and make them aware of any support available.

## Deliverable Six:
## A resource discovery framework that integrates with existing UTAS repositories exposing selected high quality UTAS learning resources to the world.

***Status: Achieved***

A resource discovery framework was developed based on literature review and consultation with the ACODE and UTAS community.  There was substantial development carried out by the project on ensuring metadata and protocols of the repository can integrate with the discovery framework. This is important to allow other repositories and web engines to harvest and read the repository for sharing.

The repository has been proven discoverable by web engines such as Google. Objects and their metadata are usually visible on the web one month after deposit in the repository.

### Issues

The project experienced technical difficulty in exposing repository metadata through the harvesting protocol (OAI-PMH).  The fault was lodged with the vendor Pearson who provided that the issue would be resolved in the next upgrade to the repository.

It currently takes one month for learning objects to be discovered by Google and it would be optimal if this timeframe could be shortened.  Unfortunately, this is somewhat to do with web engine trust and continuing effort to ensure search engine optimisation.

### Lessons Learned

- Upgrading to the latest version of the Equella should ensure discoverability of the repository.
- Continual resourcing is required to ensure and improve discoverability of the repository.  This is the type of activity that could be carried out by an LOR manager

# Evaluation Activities

The external monitoring and evaluation activities covered all phases of the project for the period September 2014 to December 2015. Based on the monitoring and evaluation evidence, the evaluation confirms that the project goals were achieved and, in some cases exceeded, within budget and within the approved time frames for the project.

Two evaluation methods were used to evaluate project activities; they are formative and summative evaluation:

- Formative evaluation of the progress of the project in accordance with the project Goals specified in the project proposal. This assisted the project team to monitor, adjust and refine the project activities and deliverables.
- Summative assessment of the attainment of the project deliverables, including issues, statuses and lessons learned were detailed above.

The evaluation plan was guided by the processes specified in the project submission and the extent that these have been achieved. Where variations in the processes occurred, the reasons were documented and reported on, including any unanticipated outcomes.

Short conversations with participants included one set of focus groups and interviews with the Champions before their engagement with the project and individual Skype meetings at the end of the project, were held to capture participants' feedback and to inform the project's summative evaluation.

# Dissemination Activities

Deliverable 5 as described above outlines the dissemination activities carried out during the project term. The project team successfully delivered one full day workshop held in Hobart in Feb 2015, where all six champions attended. Instead of full day workshops and consultations, the project team decided to promote and disseminate the project at key learning and teaching internal university events, such as Teaching Matters, as well as at key national conferences. Therefore, the adjustments of this derivable enabled the results and progress of this project to be successfully disseminated at institutional and national levels. Please see below a list of presentations:

Padgett, L., Warren, V., Carew, T & Bossu, C. (2014, 2-3 Dec). Sharing learning resources to meet Teaching Performance Expectations: An institutional significance project. Workshop presented at Teaching Matters 2014: Places and Spaces, Launceston, Australia.

Padgett, L., van der Veer, B & Carew, T. (2015, 24 June). Learning Object Repository Development at UTAS. Presentation at the TechExpo 2015, Launceston, Australia.

Padgett, L. & Carew, T. (2015, 4 Sep). Learning Object Repository Development at the University of Tasmania. Presentation at the Navigate Equella User Conference 2015, Melbourne, Australia.

van der Veer, B & Carew, T. (2015, 2 Dec). Sharing learning resources. Workshop presented at Teaching Matters 2015: Tasmania Blends, Hobart, Australia.

van der Veer, B., Padgett, L. & Carew, T. (2015, 18 Nov). Learning Object Repository, CSU Ed Week: Education without Borders: Open and Online Learning, Albury, Australia

# Conclusions

The repository has the potential to engage students in learning and therefore improve teaching and learning institution wide and could be a powerful tool to make the work of academics more efficient and innovative. Project participants provided that they would like to see the repository as an ongoing resource for teaching and learning at the University of Tasmania. Therefore, a sustainability plan is needed in order to maintain and continue development of the repository.

The continued use of the repository will rely upon support from the university key senior executives, for example the DVC Students and Education. More broadly, strategic decisions relating to the teaching and learning repository should be made in conjunction with collective visions and approaches to repositories across the university.

The ongoing management of the repository may be best undertaken by the Library. This is because the library is the application manager (Equella) and contains staff with expert and relevant knowledge in the management of repositories. It is therefore recommended that any further considerations for the repository's sustainability should include Library input and resourced appropriately.

Using the champions to advertise and disseminate the repository within their faculties and across the university would also be a key activity.