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ascilite Report 3 for the Carrick Exchange Project: Themes, Issues and Concerns Emerging Through Focus Groups

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ascilite Report 3 for the Carrick Exchange Project: Themes, Issues and Concerns Emerging Through Focus Groups

Abstract

This document reports on the findings of three focus groups conducted with key practitioners from the Australian higher education sector for the ascilite sub-project of the Carrick Exchange development. It continues to explore emerging themes, issues and concerns, building on the findings of ascilite Report 1. The analysis is one of several data gathering methods implemented as part of the ascilite Stage 2 sub-project research. The analysis of three focus groups with a total of twenty-two participants, follows the report of individual interviews conducted with a separate group of twenty-nine key practitioners from the higher education sector and the Vocational, Education and Training (VET) sector. These two reports represent the views of fifty-one practitioners in all from the education sector regarding potential engagement with the Carrick Exchange; issues of resource contribution, identification, sharing, rewards and recognition; and related formal and informal peer review, commentary and feedback.

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***ascilite* Report 3 for the Carrick Exchange Project:
Themes, Issues and Concerns
Emerging Through Focus Groups**

Robyn Philip, Dominique Parrish, Geraldine Lefoe and Meg O'Reilly

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***ascilite* Report 3 for the Carrick Exchange Project: Themes, issues and concerns emerging through focus groups**

Executive Summary

1. Overview

This document reports on the findings of three focus groups conducted with key practitioners from the Australian higher education sector for the *ascilite* sub-project of the Carrick Exchange development. It continues to explore emerging themes, issues and concerns, building on the findings of *ascilite* Report 1. The analysis is one of several data gathering methods implemented as part of the *ascilite* Stage 2 sub-project research. The analysis of three focus groups with a total of twenty-two participants, follows the report of individual interviews conducted with a separate group of twenty-nine key practitioners from the higher education sector and the Vocational, Education and Training (VET) sector. These two reports represent the views of fifty-one practitioners in all from the education sector regarding potential engagement with the Carrick Exchange; issues of resource contribution, identification, sharing, rewards and recognition; and related formal and informal peer review, commentary and feedback. Other documentation, a literature review and these reports form the basis for the final report and recommendations to the Carrick Exchange management team, due in September 2007.¹

The focus groups were held in Sydney, Brisbane and Melbourne. Representatives were invited from universities across Australia. As far as possible each focus group aimed to include a diverse mix of academics and support staff. Using an iterative Design-Based research approach, the aim of the focus groups was to build on the outcomes of data already gathered from the individual interviews, to review the findings, discuss the issues arising from the analysis, prioritise issues raised, generate possible strategies for addressing the issues, generate ideas for policy development and implementation, and identify missing data or directions for further research. It should be noted that a detailed literature review has not been included in this report as a summary review was included in the report of individual interviews (Philip, Parrish, Lefoe and O'Reilly, 2007), and an extensive literature review will be included with the final reports due by 30 September.

¹ Further project details can be found in the *ascilite*/Carrick Exchange Proposal and Project Plan 2007 (*ascilite*, 2007), in papers by Phillips, Orrell and Millea (2007), and Lefoe, O'Reilly, Parrish, Bennett, Keppell and Gunn (2007), and on the Carrick Exchange website: <http://www.carrickexchange.edu.au>.

2. Outcomes

Overall, the focus group findings confirm the views of individuals interviewed in the previous data gathering sessions. Given that there were eight focus group participants with involvement in staff development and six in educational development, this reinforced the awareness of the issues around new technologies and uptake in the higher education sector. Librarians in the three groups seemed particularly attuned to the issues of rights management, and use of the new social software tools and how these could be adapted within the Carrick Exchange context.

2.1. Issues

The issues of particular concern raised by the focus group participants were as follows.

- *Ease of use*
This was reiterated by all participants as a top priority.
- *The purpose of the Carrick Exchange*
The Carrick Exchange was urged not to be 'all things to all people'. How the informal, self-organising social networking aspects of the Carrick Exchange are to be reconciled with the more formal, standardised processes needed for high quality contributions with the equivalence of scholarly peer reviewed research was considered problematic. There is a need to know how the networks and tools (people and technologies) that staff are now using will interface with or transfer to the Carrick Exchange. The Carrick Exchange must cater for the diverse needs of consumers and producers within the system.
- *The types of resources to be included*
The types of resources to be placed in and/or connected to the Carrick Exchange was of concern. If the collection included only Carrick Institute project related documents and resources this, on its own, was considered to be a very valuable resource for learning and teaching in higher education. The Carrick Exchange was urged by some to think of 'resources' not just as objects or texts of various kinds, but 'people' as well. The need for demonstrable quality in everything was considered paramount. Many believed that the Carrick Exchange should be viewed as 'a high quality space, housing high quality resources, with peer review the key to this perception' (participant comment).
- *Differentiation between the Carrick Exchange and other databases and systems in existence.*
If teaching resources are to be included in the Carrick Exchange other than Carrick Institute project related items, the Carrick Exchange needs to indicate the purpose for their inclusion and why this is not duplication of effort within the higher education sector. There is a need to demonstrate added value offered by the system. This might, for example, be through the Carrick Exchange providing links to a vast array of teaching and learning resources in Australian higher education with networks linking all Australian researchers involved in specific communities.

- *Sustainable long-term planning and management*

The Carrick Exchange was urged to think in the long term and not expect a vibrant community to immediately establish itself without considerable support for implementation and maintenance.

2.2. Additional findings and concerns

Areas where the focus groups provided further commentary over and above the interview findings were:

a) *Engagement*

An annual conference to either identify and/or review resources was suggested at the first focus group and greeted optimistically by the other focus group participants. A conference would have multiple benefits, e.g. it would be viewed as a prestigious event valued by individuals and institutions, it would have professional development benefits, provide an opportunity to network, and benchmark or moderate the review processes.

b) *Design features*

The three most important design features of the Carrick Exchange were considered to be:

1. A database of high quality teaching materials catalogued according to a number of criteria, including disciplinary and cross-disciplinary criteria.
2. The ability to seamlessly and intuitively search the Carrick Exchange when also conducting institutional database searches.
3. Access to the details of various communities of practice, and the facility to contact members of these communities through the Carrick Exchange.

c) *Rewards and incentives for contributing to the Carrick Exchange*

The three most important incentives to contribution to the Carrick Exchange were considered to be:

1. Recognition from the home institution for contributions to the Carrick Exchange by providing time and/or funds, in the same way that time and/or funds are allocated for scholarly research.
2. Reports about resources submitted to the Carrick Exchange that could be used for promotion and tenure applications.
3. Acknowledgement as the creator of a resource each time a resource is reused.

d) *Rights management*

Managers of the Carrick Exchange should be aware that currently held cultural views about ownership of ideas in objects may change over time.

e) *Disincentives*

- Peer review and commentary are considered to be both incentives and disincentives.
- In a culture where scholarship and scholarly practice are based on collaboration, payment for contribution to the Carrick Exchange may prove a disincentive to some.

Introduction

3. Overview

This document reports on the findings of three focus groups conducted with key practitioners from the Australian higher education sector for the *ascilite* sub-project of the Carrick Exchange development. The analysis is one of several data gathering methods implemented as part of the *ascilite* Stage 2 sub-project research. It continues to explore emerging themes, issues and concerns, building on the findings of *ascilite* Report 1.

The *ascilite* research has been designed to inform the on-going development of the Carrick Exchange. This research focuses on:

- *Users' needs within the higher education sector for collaborative and communication spaces for learning and teaching;*
- *The conditions and contexts of use of resources available for sharing and reuse within the higher education sector; and*
- *The policies necessary to facilitate engagement of the higher education sector with the Carrick Exchange. (ascilite, 2007).*

3.1. The problem

One of the key priorities for the Carrick Institute for Learning and Teaching in Higher Education was to develop 'mechanisms for the identification, dissemination and embedding of good individual and institutional practices at a national and international level' (Phillips, Orrell & Millea, 2007, p. 1). The Carrick Exchange was planned as a major initiative to support this mission. It is being designed as a community or 'hub' for sharing and developing best practice in teaching and learning, and as a digital repository of, or network for, quality resources. However, the literature indicates that while there has been growth in the number of repositories around the world for research, learning and teaching, uptake has been slower than expected (see e.g. Gunn, Woodgate & O'Grady, 2005; Henty, 2007; Hummel et al., 2005; Littlejohn, 2003). Further, establishing communities of practice per se is more complex than just providing social software tools and spaces for discussions and resource sharing. Some believe poor engagement by the target users is related to lack of clarity about purpose (Gosper, Woo, Gibbs, Hand, Kerr, & Rich, 2005; Margaryan & Littlejohn, 2007) and lack of strategies and resources directed to fully engaging the community for which the repository has been designed (see e.g. Wenger, McDermott & Snyder, 2002).

It is with a view to building on the investigations of Stage 1, identifying the needs of potential Carrick Exchange users, and addressing the issues of engagement, resource contribution and identification, and peer review and commentary that the *ascilite* research has been focused in Stage 2 (January – September 2007).

The focus group analysis reported here, i.e. consultation with twenty-two participants, follows the report of individual interviews conducted with another group of twenty-nine key practitioners from the higher education sector and the Vocational, Education and Training (VET) sector. (See the *ascilite* Report on Key Practitioner Interviews for the Carrick Exchange Project, Philip, Parrish, Lefoe & O'Reilly, 2007.) These two reports represent the views of fifty-one practitioners from the education sector regarding: potential engagement with the Carrick

Exchange; issues of resource contribution, identification, sharing, rewards and recognition; and related formal and informal peer review, commentary and feedback. These two reports, other data and a literature review form the basis for the final report and recommendations to the Carrick Exchange management team, due in September 2007.

Further details about the *ascilite* project can be found in the *ascilite*/Carrick Exchange Proposal and Project Plan 2007 (*ascilite*, 2007), in papers by Phillips, Orrell and Millea (2007), and Lefoe, O'Reilly, Parrish, Bennett, Keppell and Gunn (2007), and on the Carrick Exchange website: <http://www.carrickexchange.edu.au>.

4. Methodology

The focus group data analysis (Stage 2, Phase 2), along with the findings from the individual interviews conducted earlier (Stage 2, Phase 1), reflect the Design-Based research methodology. The full cycle of the Design-Based Research methodology, i.e. 'Analysis of the Problem by Researchers and Practitioners', 'Development of solutions within a theoretical framework', 'Evaluation and testing of the solutions in practice', and then finally 'Reflection and documentation to produce design principles' (see Design-Based Research Collective, 2003; and van den Akker, 1999) is undertaken within each of the Phases². In this case the research has completed two cycles. Design-based research aims to link researchers and practitioners in the collaborative discovery of new knowledge. The *ascilite* research has aimed to achieve this by involving representatives from the higher education sector who will potentially be the primary users of the Carrick Exchange, seeking and documenting their views and needs.

The data for this report was gathered from three focus groups held in Sydney, Brisbane and Melbourne. A total of twenty-two practitioners participated. Together with individual interviews this makes a total of fifty-one key practitioners from the sector who have been consulted in the research process. On completion of the report, findings will be presented to three reference groups and further reviewed at an international symposium to be hosted during the 24th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education (*ascilite*).

4.1. Focus group aims

The aims of the focus groups were to build on the outcomes of the data already gathered from the individual interviews and:

- Review the data and report from the key practitioner interviews;
- Discuss the issues that arose from the data;
- Prioritise issues raised and generate possible strategies for addressing these;
- Generate ideas for policy development and implementation; and
- Identify missing data or where further research was required.

Overall, the aim was to work towards the development of possible strategies, solutions, recommendations and policies in the three key areas: engagement; resource contribution and identification; and peer review and commentary.

² For more details about the research methodology see the Project Plan and Proposal (*ascilite*, 2007).

4.2. Outcomes

Outcomes from the focus group data collection and analysis process included:

- A report to be shared initially with:
 - The Carrick Exchange development team to inform on-going development;
 - The three ascilite reference groups as a form of validation of the findings
 - Participants at the Carrick Exchange symposium to be held at the ascilite conference in December 2007.
- Dissemination of issues concerning the Carrick Exchange to those taking part in the focus groups and interviews.
- Input into the data collection and analysis process that constitutes Phase 2 of the Design-Based research followed in the project.

4.3. Focus group membership

Representatives were invited from universities across Australia. As far as possible the aim was to include:

- Academics interested in learning and teaching but with little experience of technology;
- Members of cross-institutional teams (Carrick grant holders, consortiums etc);
- Educational and staff developers;
- Librarians;
- 'Early adopters';
- Repository representatives; and
- A mix of gender and cultural backgrounds.

Availability of staff meant that it was not always possible to achieve this diverse mix in each focus group. However we did achieve representation from five of the six States, including Western Australia and South Australia. Unfortunately there was no representatives from the Northern Territory, The Australian Capital Territory or Tasmania. Six staff attended in Sydney; four in Brisbane and twelve in Melbourne. Four to twelve participants were in each group, and each focus group included some representation of educational and staff developers, and members of cross-institutional collaborative project teams. In at least two of the focus groups there were librarians and repository representatives. Two participants represented the vast majority of staff in higher education who have an interest in learning and teaching but may have only had limited use of the technology. In addition, within the groups there were varying degrees of expertise from those highly skilled in the use of technology through to those with a more limited experience. Two participants had also attended the Carrick Exchange Think Tank forum in Melbourne, September 2006. Some focus group participants aligned to more than one representative category. Table 1 shows the twenty-two universities represented and the background of participants.

Table 1: Universities represented and participants' details

Universities represented (22)		
Melbourne (12)	Brisbane (4)	Sydney (6)
Deakin University, Vic La Trobe University, Vic Monash University, Vic RMIT University, Vic The University of Melbourne, Vic Victoria University, Vic Flinders University, SA The University of Adelaide, SA Curtin University of Technology, WA Edith Cowan University, WA Murdoch University, WA The University of WA, WA	Southern Cross University, NSW Central Queensland University, QLD Griffith University, QLD University of Southern Queensland, QLD	Macquarie University, NSW The University of Sydney, NSW University of New South Wales, NSW University of Technology, Sydney, NSW University of Western Sydney, NSW University of Wollongong, NSW
Participants' details (some participants represented more than one category)		Frequency
Staff Development		8
Members of cross-institutional teams (e.g. Carrick Institute or other collaborative project)		7
Educational Development		6
Librarians		5
Repository representatives		3
'Early adopter' in the use of technology		2
Academics interested in learning and teaching but with limited experience of technology		2
Females		13
Males		9

4.4. Conduct of the focus groups

In keeping with the iterative Design-Based research approach, the findings from the key practitioner interviews were used as a starting point for reflection by the focus group participants. The focus groups were planned as structured discussions of two hours each, but with sufficient flexibility to pursue relevant ideas of mutual interest to the participants and the researchers. Each group was facilitated by the same two *ascilite* team members. Because of the large size of the Melbourne group, it was split into two small groups after the initial orientation and demonstration to discuss issues of engagement. The groups were then combined to discuss resource identification and contribution, and peer review and commentary. All discussions were recorded and summary transcripts made. NVivo was used to help code and analyse the data.

The research questions were those established for the *ascilite* sub-project:

- What are the successful methods for establishing and maintaining engagement (i.e. use, reuse and recognition) by the higher education community with Carrick Exchange?
- What resource contribution and identification methods will engage and encourage users to contribute and collaborate within the Carrick Exchange?
- What peer review and commentary protocols and mechanisms can be derived from the higher education community?

Prior to the focus group participants were provided with:

- Promotional background material about the Carrick Exchange;
- The proposed focus group questions; and
- The Executive Summary, including the key findings, from the *ascilite* report on key practitioner interviews.

During the focus group participants were:

- Shown a PowerPoint demonstration of the Carrick Exchange, including a glimpse of the proposed interface and the personal space known as 'My Exchange'; and
- Invited to complete during the session a short written questionnaire including open ended and scaled questions.

4.5. Literature review

No literature review has been included with this report (other than the references cited in the statement of the problem above). A literature review was included in *ascilite* Report 1 on the key practitioner interviews, and there will be a full literature review forthcoming as a separate document and deliverable of Stage 2 of the *ascilite* Carrick Exchange sub-project research.

4.6. Project Team

<i>Project Leaders</i>	Dr Geraldine Lefoe, University of Wollongong Meg O'Reilly, Southern Cross University
<i>Project Manager</i>	Dominique Parrish, Learning Achievements & Solutions
<i>Research Manager</i>	Robyn Philip, Consultant
<i>Project Team</i>	Dr Cathy Gunn, University of Auckland Dr Mike Keppell, Hong Kong Institute of Education
<i>Project Steering Group (ascilite Executive)</i>	Dr Joe Luca, Edith Cowan University, Prof Kar-Tin Lee, Queensland University of Technology, Dr Barney Dalgarno, Charles Sturt University, Dr Bob Corderoy, University of NSW, Caroline Steel, University of Queensland Allan Christie, Netspot Pty Ltd
<i>International Adviser</i>	Dr Allison Littlejohn, Glasgow-Caledonian University
<i>Focus group facilitation</i>	Dominique Parrish and Robyn Philip
<i>Transcription, data entry, compilation of statistics and identification of preliminary themes</i>	Dominique Parrish
<i>Analysis of focus group data and report writing</i>	Robyn Philip

4.7. Acknowledgements

The research team would like to thank all the participants who contributed to the focus groups, and colleagues from Macquarie University who provided feedback on the research design for the focus groups. We would also like to thank in advance the members of the three *ascilite* Reference Groups who will respond to this report, critically evaluating the findings.

Findings

Providing the focus group participants with the Executive Summary and key findings from the interview report helped to quickly launch the focus group discussion in the target areas. Participants had the advantage of coming to the discussion with a common reference point and an understanding of the identified issues around the development of the Carrick Exchange which was not the case for the individually interviewed key practitioners. This helped to move the discussion forward. Being able to see a demonstration of the proposed Carrick Exchange interface, with its emphasis on networking and community, meant that participants better understood the potential of the Carrick Exchange to act as a 'hub' to find resources – which might include both 'people' and 'things'. Given that there were eight with involvement in staff development and six in educational development, this reinforced the awareness of the issues around new technologies and uptake in the higher education sector. Librarians in the three groups seemed particularly attuned to the ubiquitous problems of rights management which affect sharing, and issues around the new social software tools and communities.

Participants were keen to know what resources would be placed in and connected to the Carrick Exchange. They remained uncertain about the purpose of the Carrick Exchange and its place in Australian higher education and internationally. The Carrick Exchange was warned against trying to 'be all things to all people'. Again, however, there seemed to be agreement generally that by aggregating the output from the Carrick Institute Grant Scheme a valuable collection of teaching and learning documents, texts of various kinds and 'products' could be made readily accessible to the Australian higher education sector for immediate use. Those already managing or working with repositories, like interviewees from the previous data gathering process, cautioned the Carrick Exchange to differentiate itself from databases and systems already out there and reiterated the need to think in the long term and not to expect the target audience to immediately recognise the benefits of depositing and sharing resources. Nor should the Carrick Exchange expect a vibrant community to immediately establish itself without considerable support for implementation and maintenance. Nonetheless, as one participant said:

*The Carrick Exchange has the potential to address academic isolation through its networking capability and links to quality resources about learning and teaching.
(participant comment)*

5. Engagement

The following comments highlight some of the problematic issues raised by participants. Undoubtedly the purpose for the Carrick Exchange must be clearly articulated to the higher education community to allay the fears expressed below.

*It seems that there are some underlying tensions behind the purpose of the Exchange . . . what are the models driving it? Is it about creating communities of practice? Is it about positioning teaching and learning in a scholarly way so that it can compete with the research quality framework? Is it about getting a whole raft of evidence-based practice that can underpin the future of teaching and learning? They are all different kinds of ways of thinking about dissemination, communication and change, so unless there is some clarity there then there will be the experience of those tensions.
(participant comment)*

I am not quite sure that I see the repository as necessarily being a key part of the Carrick Exchange, as the top priority. There are so many around the world, there are so many places that you can put that material if you want to. Why would you want to create another one? I am not actually sure there is value in doing it. The immense number of outputs from the Carrick projects might be enough to have in the repository. Plus it is going to be very difficult to get buy in institutionally and institutions are not going to give up copyright on their most important teaching and learning resources. (participant comment)

5.1. Recommendations for engagement

The following recommendations came from the focus group interviews.

- Define the purpose of the Carrick Exchange.
- Membership
 - Define the membership of the Carrick Exchange. Will international membership be allowed?
 - The system should allow for international collaborations and membership.
 - The Carrick Exchange should not be limited to people applying for and winning awards and grants.
 - It was suggested that students and student associations be given membership of the Carrick Exchange. (While the primary audience for the Carrick Exchange is academics, managers and leaders of learning and teaching in Australian higher education, a secondary audience could include students and international members.)
- The functions, incentives for engagement and aspects of the Carrick Exchange that are relevant and desired will be different for the various stakeholders engaging in the Carrick Exchange.
- The Carrick Exchange should not just be seen as a place from which to 'take'.
- Champions are critical for driving and promoting the system.
- Currency and leadership in the education field should be promoted as reasons for using the Carrick Exchange.
- The Carrick Exchange should have a discipline focus.
- There should be easy and free access. The first experience especially must be positive, and all searches need to give some useful feedback.
- Ensure there is status attached to participation in the Carrick Exchange .
- Promote reuse as an incentive for engagement.
- Networks: Be able to build a network of contacts within the higher education community that can contribute to and inform areas of interest to individuals.
- Strategies to maintain momentum after the initial phases will need to be put in place.

You have to have appropriate incentives to a) get people submitting and engaging, and b) keep people submitting and engaging. (participant comment)

- Professional development funds should be provided to promote the Carrick Exchange in local forums.
- Facilitate or support other types of learning activity, such as the activities of special interest groups, labs or research centres, possibly even complementing the role of professional associations.
- Support the Carrick Exchange through marketing, promotion and quality, generate high traffic and usage to be seen as the place for sharing ideas and resources in teaching and learning.

- The Web 2.0 technology tools are useful for collaborating on projects and as such will be a valuable inclusion in the Carrick Exchange.

Appendix C provides the final comments from one of the focus groups about issues participants thought would affect engagement with the Carrick Exchange.

6. Resource identification and contribution

6.1. Design features of the Carrick Exchange

One of the aims of the focus group discussions was to present some of the issues raised by the interviewees in the previous report regarding design of the Carrick Exchange, and ask the focus group participants to prioritise them. Design was taken in the broadest sense to include functional features as well as conceptual issues, around engagement, and content identification and contribution. The features chosen for a written response did not represent a comprehensive list, but helped in the process of focussing important points and prioritising issues. Tables 2 and 3 are indicative only, but the data suggests trends that could emerge within the higher education community.

In terms of engaging with the Carrick Exchange, identifying resources and how resources might be contributed and shared, the focus group participants were asked to rate the importance of nine features that could be implemented (1 being most important, and 5 least important). This written activity was completed in sections after each group discussion on the relevant topic area (engagement, resource identification and contribution, and peer review and commentary). All 22 participants completed the questionnaire. See Table 2 and Figure 1 for results regarding the rating of suggested design features.

6.1.1. Recommended design features

The top three design features from the list provided were (most important, column 1 only):

- A database of high quality teaching materials catalogued according to a number of criteria, including disciplinary and cross-disciplinary criteria (16 participants; 73%) (Item 9).
- The ability to seamlessly and intuitively search the Carrick Exchange when also conducting institutional database searches. (14; 64%) (Item 1).
- Access to the details of various communities of practice, and contact members of these communities through the Carrick Exchange. (13; 59%) (Item 7).

Generally the clustering of priorities over columns 1, 2 and 3 shows that while there may be individual preferences, the nine items listed in Table 2 are all generally desirable features. In order the design features are:

1. A database of high quality teaching materials catalogued according to a number of criteria including disciplinary and cross-disciplinary criteria.
2. In the process of conducting an institutional database search, users have the ability to seamlessly/intuitively search the Carrick Exchange.
3. Details of various communities of practice, and the ability to contact members of these communities through the Carrick Exchange.

4. The information and facilities to be able to contact and communicate with the resource creator/s.

AND

4. Alerts to notify you when new items have been submitted in a particular area of interest or by a particular person.
5. Support from designated staff such as librarians to manage the copyright and intellectual property requirements for resources submitted to the Carrick Exchange.

AND

5. A communication area within the Carrick Exchange where issues can be raised and discussed.
6. Regular updates, such as electronic newsletters which inform you of recent developments and contributions to the repository.

AND

7. A space where you can store your 'work in progress' and invite others to give feedback on this work that could then assist in the development or finalization of the resource.

Table 2: Carrick Exchange design features

Importance of Carrick Exchange design features (1 most important; 5 least important; N = 22)

Design Features	1	2	3	4	5	N/R #
1. In the process of conducting an institutional database search, users have the ability to seamlessly/intuitively search the Carrick Exchange.	14	6	1		1	
2. Support from designated staff such as librarians to manage the copyright and intellectual property requirements for resources submitted to the Carrick Exchange.	11	5	5	1		
3. Regular updates, such as electronic newsletters which inform you of recent developments and contributions to the repository.	6	7	7	2		
4. The information and facilities to be able to contact and communicate with the resource creator/s.	12	8	1			1
5. A space where you can store your 'work in progress' and invite others to give feedback on this work that could then assist in the development or finalization of the resource.	6	6	7	3		
6. Alerts to notify you when new items have been submitted in a particular area of interest or by a particular person.	12	7	3			
7. Details of various communities of practice, and the ability to contact members of these communities through the Carrick Exchange.	13	4	4			1
8. A communication area within the Carrick Exchange where issues can be raised and discussed.	11	6	4		1	
9. A database of high quality teaching materials catalogued according to a number of criteria including disciplinary and cross-disciplinary criteria.	16	3	3			

#N/R = no response

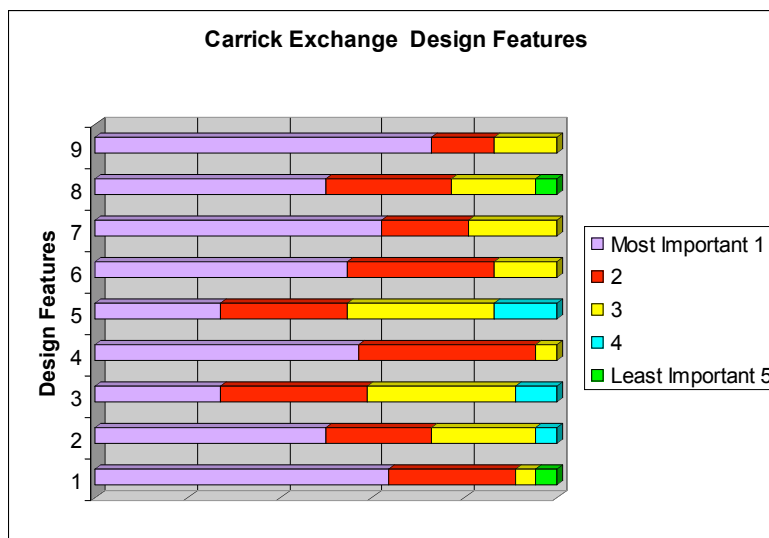


Figure 1: Carrick Exchange design features

6.2. Other features, recommendations and comments

When asked what other design features were desirable participants responded as follows.

a) *The human dimension*

The Carrick Exchange should not be a 'faceless website with no help'. Staff support was very important to help with orientation and troubleshooting. One participant strongly expressed the view that people should be considered as resources, that the research should not only focus on resources as digital or inanimate products. People to run workshops could be considered 'resources'.

b) *Communication*

Ease of use was important to foster good communication. Accounts should be individual ones (not institutional ones) which encouraged social networking and peer review. Members should have the facility to contact and engage with like minded colleagues and easily engage at an international level of exchange.

c) *Reporting, tracking and recognition*

There should be a reporting function for contributors to see the number of hits and/or downloads per resource. Statistics should be compiled about how the resources are being used. This record allows for follow up so users can be contacted on how they have used a downloaded resource etc and provides a measurable record for use in promotion, awards etc. It would be interesting to see 'Resources of the Week/Month' with a rating, based on resources that are most often accessed or the newest peer reviewed resources. Users should be required to register their contact details when downloading a resource from the Carrick Exchange. Have an automated email sent to contributors annually asking them to update their contact details, resource etc. This would help to maintain accuracy and currency of resources.

d) *Dissemination*

Progress reports on larger projects funded by Carrick Institute should be made available through the Carrick Exchange. Additionally, information should be automatically pushed out to users with RSS feeds from discussions. This helps to keep discussions alive and reminds members and potential users about the Carrick Exchange.

e) *Access*

Multiple levels of access and permissions to view, browse, review, collaborate etc were recommended. Resources should be available internationally as well as nationally to make it a really global resource. As the key practitioners had emphasised in the individual interviews access should be quick obvious, simple and relevant.

f) *Alignment with institutional repositories and networks*

The system must interface with university-wide (national) authentication and institution based repositories that already exist. Some participants wanted to know what networks and tools people are already using and how the Carrick Exchange will interface with these. The Carrick Exchange was encouraged to 'take a risk' on new models and ways of communicating.

g) *Tools*

There should be access to communication technology such as Elluminate for virtual meetings, technological support tools with automated feedback on learning, and Web 2.0 tools for collaboration and social networking. Recommendations about search tools included:

- Must have a sophisticated search engine;
- Federated search mechanism to search other repositories and use e.g. Google Scholar;
- Harvest from all other higher education institutional repositories so it can be a national representation of teaching and learning;
- Be able to select only 'peer reviewed' items if requested.

h) Content types

There should be access to examples of best practice from teaching and learning support areas such as libraries and student learning centres with links to similar resources: 'You may also be interested in a,b,c . . .'. Failed approaches to teaching and learning should be included for the stories they provide as well as successful examples. FAQs could be created by asking questions of the members and compiling these. Tips and links on how to use resources in teaching, new ideas, how to use new technologies would be valuable content types. The content types should support Carrick activities, i.e. the grants, awards and fellowships as well as store or point to other resource types. Initially the Carrick Exchange could link to other repositories rather than store large numbers of resources on site.

Other content types suggested:

- 'Starred resources' that are considered of high quality, and often the outcomes of Carrick Institute projects.
- Reporting and updates on Carrick institute funded projects in their development stages and not only completed project reports.
- 'Developing resources', with facility to invite comment to assist and inform the continuing development of the resource.
- Assessment ideas, ways of managing groups, actual lab activities, research-style projects.
- A tour of the Carrick Exchange (e.g. tutorial, overview) with examples of specific actions, searches, how people are using the Carrick Exchange with links to networking and contact for those people.

i) File types

The Carrick Exchange should facilitate the ability to upload a variety of file types (e.g. Flash PDF docs, PPT). Version control should be carefully implemented.

j) Classification of resources

The Carrick Exchange needs to provide a good classification system - this might include 'baskets' or lists that store links to resources of interest identified by the user. There should be a stratified system of classification, with peer reviewed contributions at the top level of approved/endorsed content, and allowing for other categories of submission that are not formally peer reviewed or maybe under review. The system should allow for the relative merits of a resource to be assessed by the user before an item is downloaded. Details of the context of use of contributed content are important, e.g.

The presentation of content for non-English speaking students will be quite different to the presentation of the same content for English speaking students. (participant comment)

k) Metadata

A combined approach to metadata contribution could be adopted to meet the needs of different users of the system. Resource contributors could assign metadata about, e.g. what they think the item is and what it could be used for; other members could add metadata about how useful they found the resource or contribution; and peer reviewers (for some contributions) could add tags around formal review categories. Metadata options should include standardised subject headings that users can select from and assign to the shared resource, plus a keyword search function and a browse option. The browse option would utilise the subject headings and return a list of resources meeting the search request.

This is useful when searchers do not know exactly what they are looking for or if a particular term has many synonyms. (participant comment)

7. Contribution

Most of the focus group participants were aware that there were likely to be many levels of engagement with and contribution to the Carrick Exchange. Some saw that the Carrick Exchange will need to cater to the needs of 'consumers' and 'producers'.

The Carrick Exchange needs to cater for both the consumers and the producers who are distinctively different in their needs and uses for the Carrick Exchange. As a producer there needs to be a hierarchy of opportunities for contribution, ranging from just contributing for informal dialogue through to submitting for peer review by a select group of esteemed colleagues which is aligned to a more scholarly process. In between there needs to be various points that people can enter based on needs and expectations and aspirations. (participant comment)

Details of the context of use of contributed content are important, for example the presentation of content for non-English speaking students will be quite different to the presentation of the same content for English speaking students. (participant comment)

7.1. Incentives for contribution

For the Carrick Exchange to be successful, not only must the design be in line with the needs of the target audience, but the issues of incentives, rewards and recognition need consideration. This was firmly brought forward in the interviews with individuals prior to the focus groups. The questions presented in Table 3 were designed using the findings from the earlier report. Focus group participants were asked to rate nine incentives for contribution to the Carrick Exchange (1 being most important, and 5 least important). All 22 participants completed this part of the questionnaire as well.

The three most important incentives were:

- Recognition from the home institution for contributions to the Carrick Exchange by providing time and/or funds, in the same way that time and/or funds are allocated for scholarly research' (16 participants; 73%)(item 4);
- Reports about resources submitted to the Carrick Exchange that could be used for promotion and tenure applications. (15; 68%)(item 1);
- Acknowledgement as the creator of a resource each time a resource is reused. (14; 64%) (item 2).

Overall by aggregating columns 1, 2 and 3, there is very little difference in the importance of incentives suggested for items 1- 5 and 7. It would seem that any of these could be

implemented and be well received by the community. These items are marked with an asterisk on Table 3 and listed below.

- Item 1: If you were provided with reports about resources you submitted to the Carrick Exchange that could then be used in promotion and tenure applications. (22; 100%)
- Item 2: If you were acknowledged as the creator of a resource each time it was reused. (22; 100%)
- Item 4: If your university recognised and valued your contributions to the Carrick Exchange by providing you with time and/or funds, in the same way that time and/or funds are allocated for scholarly research. (22; 100%)
- Item 5: If you received a grant to develop and share resources to the Carrick Exchange. (22; 100%)
- Item 3: If there was some sort of formal recognition of submissions you made to the Carrick Exchange such as awards. (21; 95%)
- Item 7: If you were acknowledged for your contributions to the Carrick Exchange in an online newsletter, at teaching and learning conferences or in other teaching and learning forums. (20; 91%)

7.1.1. Low priority incentives

(The following figures were achieved by combining columns 4 and 5.) Participants reacted strongly against the gate-keeping suggestion that access to resources be restricted to those who had already contributed to the system (17 ; 77%). Using the Carrick Exchange to sell teaching resources was considered a low priority 13 (59%). Similarly, the majority saw financial remuneration as a low priority (11; 50%), compared with 7 (32%) who thought it highly or very important.

Table 3: Carrick Exchange contribution incentives

Importance of Carrick Exchange contribution incentives (1 most important; 5 least important; N = 22)

Contribution Incentives	1	2	3	4	5	N/R #
1. If you were provided with reports about resources you submitted to the Carrick Exchange that you could then use these reports in promotion and tenure applications. *	15	7				
2. If you were acknowledged as the creator of a resource each time it was reused. *	14	4	4			
3. If there was some sort of formal recognition of submissions you made to the Carrick Exchange such as awards. *	11	7	3	1		
4. If your university recognised and valued your contributions to the Carrick Exchange by providing you with time/funds, in the same way that time/funds are allocated for scholarly research. *	16	3	3			
5. If you received a grant to develop & share resources to the Carrick Exchange. *	11	8	3			
6. If the only way you could access resources from the repository were if you first shared resources.		2	2	7	10	1
7. If you were acknowledged for your contributions to the Carrick Exchange in an online newsletter, at teaching and learning conferences or in other teaching and learning forums. *	3	8	9	2		
8. If you received financial remuneration for contributions made to the Carrick Exchange.	4	3	4	8	3	
9. If the Carrick Exchange could provide you with the necessary facilities to sell your teaching resources.	2	4	3	7	6	

#N/R = no response

* The incentives considered of most importance.

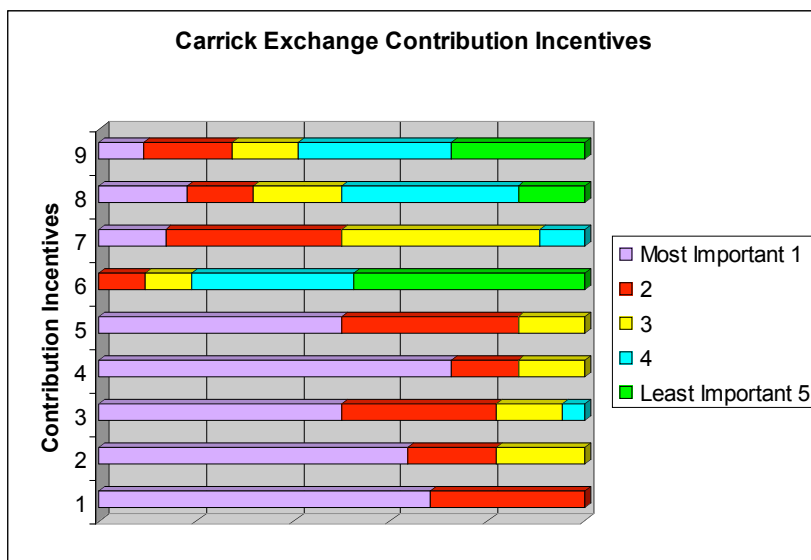


Figure 2: Carrick Exchange contribution incentives

7.2. Disincentives to contribute

Focus group participants were asked to identify disincentives to contribution in an open ended question and during the general discussion. Their responses follow.

a) *Administration, management, ease of use and access*

There is a general perceived lack of time for this type of activity. Time to check and improve materials from the context of in-house use to a level suitable for wider dissemination and public use must be acknowledged. Users must perceive a return on investment for the time committed, both personally and professionally. A system that is not relevant, is inaccessible, difficult to use, non-intuitive and time-consuming to manage will not attract users. It must work the first time users go in. Too much paperwork or bureaucracy will reduce usage of the system. Additionally, if the Carrick Exchange still has low membership and usage after a significant period (e.g. one year after launching) it may have difficulty improving this pattern of engagement.

b) *Rights management*

Control over intellectual property rights (IP), moral rights, copyright etc must be well managed. Users must perceive and retain a sense of ownership of resources. If there are issues of copyright or plagiarism this will discourage use. Further, the managers of the Carrick Exchange must be aware that cultural views currently held about ownership of ideas in objects may change over time. There may be an institutional wariness about letting resources developed within the university be released. Once resources are uploaded to the Carrick Exchange, the effort required to track, monitor and manage intellectual property rights, moral rights etc must not be onerous. Academics must be convinced that there are no risks in relation to rights management if they share resources.

c) *Quality*

If quality of an existing resource is perceived as low, users will not return. And, if there is a sense that there is too much 'gate-keeping', staff will be disinclined to contribute.

d) *Uncertainty*

A number of uncertainties were mentioned as disincentives. For example:

- Over the benefits and rewards for contributing;
- Fear of exposure – academic staff being unsure whether their work is worth being put up.
- Potential for changes of the system and policies without consultation.

e) *Competition*

Competition from other established communities and specialist tools for those communities could present difficulties for the Carrick Exchange. Many staff already have established networks that they are unlikely to move away from (online, informal, institution-based, international networks). Competition between course providers could be a disincentive to contribute resources.

One participant made the following suggestion about collegial rivalry and competition:

The problem with using the Carrick Exchange as a place for housing a portfolio of work is that others may be able to copy submitted works and use in their own award applications. This issue could be addressed by having an option of not making the portfolio of resources available for public viewing until after the award application date had closed. (participant comment)

f) *Lack of recognition and rewards*

Lack of recognition or reward for the contributor will affect uptake. There must be workplace incentives, e.g. DEST points, mandated submission and acknowledgement from the home institution. The discrepancy between recognition for contribution to teaching effort compared with scholarly research output is a disincentive to spend time on contributing to a system such as the Carrick Exchange. Teaching and learning is often seen as an 'also ran'. Contribution must be acknowledged.

g) *Payment for contribution*

Financial reward could prove a disincentive to contribution in a culture where scholarship and scholarly practice is based on collaboration. One participant commented:

I think Carrick should avoid this path – it will lead to changes in behaviour that are not helpful. (participant comment)

h) *Peer review and commentary*

Some may have a fear that work could be treated insensitively. Scholarly, thoughtful review must be encouraged, not 'rubbishing' of work. This relies on good policies and procedures. Peer review may be a time consuming process, so there needs to be value for the contributor (e.g. promotion). Also, if there is too long a gap between the time of resource contribution and publication then relevance of resource may diminish.

8. Peer review and commentary

The question of how to assess the quality of educational resources compared with peer review of scholarly materials was raised in the focus groups as in the interviews.

The issue of assessing the quality of resources in Carrick is different to assessing the quality of journal articles because of the practical bent of the things that are in Carrick. . . . When we talk about a high quality item in Carrick you are probably asking the question 'how useful is it' which is slightly different to the general question you might ask about a research article. This complicates the process somewhat because what is really needed is feedback from practitioners who have used the resource. (participant comment)

Peer review and commentary were seen to have the following goals:

1. To improve quality by supporting delivery of high quality, reviewed resources;
2. To support better outcomes of resources under development;
3. To foster professional development;and
4. Encourage collaboration and help build networks and communities of practice.

Many believed that the Carrick Exchange should be viewed as:

A high quality space, housing high quality resources, with peer review the key to this perception. (participant comment)

8.1. Commentary

The following issues were raised and strategies suggested by focus group members regarding commentary on resources of any type within the Carrick Exchange.

8.1.1. Strategies and recommendations

- *Classification*
Formal peer review is not suited to all resources. Allow for peer reviewed and non-peer reviewed items. Reviewers can belong to a specific community of practice, identified by the contributor.
- *Guidelines, policies and procedures for commentary and feedback*
 - Having guidelines in place may address issues of concern regarding informal peer review.
 - Negative or damaging judgements by members can be managed via established procedures to handle derogatory comments and so contributors are not at risk of being ridiculed or 'torn down' by other academics.
 - Guidelines provide a model for commentary and educate Carrick Exchange members on how to provide good feedback.
- *Attribution of comments*
 - Should all comments be identified? Is there a context for anonymous comments? The consensus seemed to be that commentary on the whole requires attribution, e.g. name and date.
 - Some questioned how the experience of the person providing the commentary or review could be judged. This impacts on perceptions of relevance and value of review and feedback.
- *Rating system for reviewers and commentators*
 - A rating system for comments would allow relevance to be assessed regarding educational, discipline and technical issues.
 - Have a tick box section for rating comments, e.g. 'Did you find this comment useful?' (yes/no).
 - Let the ratings system evolve over e.g. six months until a common system emerges.
- *What commentary or feedback would be useful?*
 - Commentary on the context of use of a resource, the user's experience and methods for reusing the resource.
 - Feedback on the efficacy of the technology, its robustness, successful methods of implementation, and the context of use of the technology.

8.1.2. Incentives provided by commentary on contributions

- Endorsement of individual practice and approaches.
- Receipt of constructive feedback on how to improve resources.
- Links to promotion

As far as recognition of people's contribution to teaching and learning goes, promotion is the epicentre, and probably the next closest is actually applying for a job ... If Carrick can produce changes in that area . . . so that certain forms of feedback . . . can be included in a teaching portfolio or equivalent, that would be a huge incentive to contribute. (participant comment)

- *Knowledge of the community to which members are contributing*
You are more likely to make comments about a resource, and your use of a resource, where you feel secure in knowing who the audience . . . is going to be, as opposed to making a comment in a forum of strangers, who may pounce and ridicule your comments. (participant comment)
- *Review and commentary supports the process of dissemination by engaging people in project outcomes. (participant comment)*

8.1.3. Disincentives to provide commentary

- Differences of culture and processes across disciplines may discourage inter-disciplinary feedback. For example, the feedback that an academic provides in biology may not be relevant or have the same currency in history.
- Members' feedback should be aligned with Carrick Exchange processes and policies to provide a standard of commentary and deal with negative contributions.

8.2. Peer review

The following issues were raised and strategies suggested for peer review from focus group members.

- **Presumption of quality**
Start by presuming that the Carrick Exchange users are going to submit high quality resources and that they are going to rate with actual common sense, rather than how are we going to make sure that the stuff is good? [Presume] that it will be, and work back if it is not ... because that is the way that these new sites work ... organically. (participant comment)
- **Standards**
Rigorous peer review is important for the outcomes and status of the review process. Having peer review processes in place supports the perception of quality resources and communication of best practice. (participant comment)

- Issues of time:
 - Pre submission: Recognition that time is required to check and review resources to ensure standard and quality suitable for a national and international audience. A staged process for submission may be required, with some additional funding to support the process.
 - Review: While reviewing a resource it may take some time to understand the context of the original teaching situation, as this may not be apparent or carried with the final product. Allowance for this in the workflow timeline is required.
 - While seeking quality, the peer review process must nonetheless be completed in a timely fashion.

8.2.1. Management of peer review

- Staff need to be employed to facilitate peer review, the system should not just rely on volunteers. Reviewers may also need to be paid for this type of work.
- Use the existing Carrick Awards process as a management model.
- There is a need for an editorial board for the review process which might include Carrick Institute Fellows.
- Implement a two or three step peer review process. Have a workflow model to address issues of quality, timeliness of publication and currency of the resource. Steps in the formal peer review process could be:
 1. Staff employed by the Carrick Exchange to complete initial quality assurance checks on the resource.
 2. Once passed these checks the resource is released more widely and marked as 'to be peer reviewed'.
 3. Formal peer review follows.
- Types of review
 - Quality assurance;
 - A review of usage to gauge how effective it is in different contexts; and
 - Review for feedback on something under development.
- Practitioners who have used a particular resource could be asked to act as a peer reviewer for that resource.
- Feedback from learners or the target audience should be included in the review of resources where learning is the focus.
- If peer review is undertaken by a group then the different perspectives of the reviewers, e.g. academic developer, discipline specialist, technical specialist, can inform the understandings of the other reviewers and 'promote a holistic review'.
- Guidelines and policies on:
 - What is being reviewed;
 - Who are the reviewers;
 - The criteria for assessment in template form for both the reviewer and the contributor.

8.3. Rewards and recognition for peer review and commentary

- There should be recognition of effort in providing reviews.
- Carrick Exchange awards need to be perceived as prestigious as ARC awards, so the peer review has to be rigorous and able to be proved to be rigorous.
- Ensure that the products of peer review (reports etc.) have currency and credibility in relation to established recognition and reward processes and contexts (especially promotion).
- Have rewards and privileges relating to the number of contributions: Rank people with a star rating determined by the number of contributions made. This would warrant the contributor as e.g. a 3½ star Carrick Exchange user with associated privileges attached to this star rating.
- Peer review conference days are a positive initiative, useful for professional development and networking.
- Peer review should be viewed as 'institutionally neutral' to promote its value within the higher education community.
- Reward in kind, rather than as declarable income might be provided through reimbursement for attendance costs for reviewers at an annual Carrick Exchange Conference.

8.4. Disincentives of peer review

- Peer review of resources creates a formal requirement, with the assumption that resources must be polished. As the outcome of the peer review may affect career advancement, this formality may 'kill' spontaneous social networking.
- Academic load:
Why should I review something? I'm already reviewing journal papers, grant applications, conference papers – this is one more. (participant comment)

9. Conclusion

Once the 'mission' and purpose of the Carrick Exchange is articulated to the sector, then the management team will be better able to engage champions to help develop on-going interest in this new initiative. The higher education community is keen for the system to work if it can be shown to have 'added value' and work seamlessly with other databases and across other networks. Access to a large collection of Carrick Institute projects, teaching and learning documents and texts, and other resources will be of enormous benefit to the sector. Quality, in the resources, 'objects', texts, people, networks, tools, spaces etc, is key to the success of the Carrick Exchange. Peer review, formal and informal, is highly likely to support this drive towards quality. If the Carrick Exchange can develop as a 'hub' for provision of quality teaching support in many forms it will be well regarded by the sector. As there is a desire to have a strong discipline base to the Carrick Exchange, the management team needs to consider how communities established elsewhere will transfer or link to this new space.

10. References

- ascilite (2007). *ascilite/Carrick Exchange Proposal and Project Plan 2007*. Internal document.
- Design-Based Research Collective. (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher*, 32(1), 5-8.
- Gosper, M., Woo, K., Gibbs, D., Hand, T., Kerr, S. & Rich, D. (2005). The selection and use of learning objects for teaching: User perspectives. In J. Dalziel, R. Philip & J. Clare (Eds.), *The COLIS Project: Collaborative Online Learning and Information Services*, Macquarie University E-Learning Centre of Excellence: Sydney, NSW. Ch. 6.
- Gunn, C., Woodgate, S. & O'Grady, W. (2005). Repurposing learning objects: An alternative to reusability? *ALT-J*, 13(3), 189-200.
- Henty, M. (2007). Ten major issues in providing a repository service in Australian Universities. *D-Lib Magazine*, 13(5/6). Retrieved July 20, 2007, from [http://www.dlib.org/dlib/may07/henty/05henty.html.
- Hummel, H., Tattersall, C. Brugos, D. Brouns, F., Kurvers, H. and Koper, R. (2005). Facilitating participation: From EML web site to the learning network for learning design. *Interactive Learning Environments*, 13(1-2), 55–69.
- Lefoe, G., O'Reilly, M., Parrish, D., Bennett, S., Keppell, M., & Gunn, C. (2007). The Carrick Exchange: Not just another repository. *Proceedings of the Ed-Media World Conference on Educational Media, Hypermedia and Telecommunications*, 25-29 June, Vancouver, Canada, 108-113.
- Littlejohn, A. (Ed.) (2003). *Reusing online resources: A sustainable approach to e-learning*. London & Sterling: Kogan Page.
- Margaryan, A. & Littlejohn, A. (2007). Cultural dimensions of learning object repositories. *Proceedings of the Ed-Media World Conference on Educational Media, Hypermedia and Telecommunications*, Vancouver, Canada, 25 -29 June, 4335-4343.
- Phillips, R., Orrell, J., & Millea, J. (2007). Creativity in the Envisioning of a Collaborative Learning Space: First stages in the development of the Carrick Exchange. *Proceedings of AusWeb 07, Coffs Harbour, NSW, 30 June - 4 July*. Retrieved July 30, 2007, from <http://ausweb.scu.edu.au/aw07/papers/refereed/phillips/>.
- Philip, R., Parrish, D. Lefoe, G. & O'Reilly, M. (2007). *ascilite Report 1 for the Carrick Exchange Project: Themes, issues and concerns emerging through key practitioner interviews*. Internal report.
- van den Akker, J. (1999). Principles and methods of development research. In J. van den Akker, N. Nieveen, R.M. Branch, K.L. Gustafson, & T. Plomp (Eds.), *Design methodology and developmental research in education and training* (pp. 1–14). The Netherlands: Kluwer
- Wenger, E., McDermott, R. & Snyder, W. (2002). *Cultivating communities of practice*. Boston MA: Harvard Business School Press.

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- ascilite Carrick Exchange project research website:
http://www.ascilite.org.au/index.php/Carrick_Exchange_Project
- Carrick Exchange website: <http://www.carrickexchange.edu.au/>
- Carrick Institute for Learning and Teaching in Higher Education:
<http://www.carrickinstitute.edu.au/>

Appendices

Appendix A: Focus group discussion questions

The following questions were used as a guide and prompts for the discussion.

Focus Area: Engagement, Resource Contribution and Sharing

Question 1: What are the incentives or disincentives (barriers) to engaging with the Carrick Exchange?

- 1a. What are the benefits in being able to access resources developed specifically for the higher education context?
- 1b. What incentives would motivate you to access resources from the Carrick Exchange?
- 1c. What would be the barriers or disincentives to using the Carrick Exchange?
- 1d. What rewards and recognition could higher education staff receive for engaging with the Carrick Exchange?

If Time permits further investigation could focus on:

- 1e. Other than a repository of resources, developed specifically for higher education, are there any other services and/ or supports that the Carrick Exchange could provide?
- 1f. What sorts of resources would you want to access from the Carrick Exchange?

Focus Area: Peer Review and Commentary

Question 2: Peer review and commentary

- 5a. Should all contributions to the Carrick Exchange be peer reviewed?
- 5b. If no, which resources should be peer reviewed?
- 5c. Should users be able to provide commentary on all Carrick Exchange contributions?
- 5d. If yes, what commentary information would you find useful?
- 5e. Which of the following should the Carrick Exchange offer?
 - A star rating system that is a component of commentary.
 - A star rating system that is based on the number of times a resource has been downloaded.
 - A tiered organisation of resources into:
 - Items that have not been peer review or quality assured;

- Items that have been informally peer reviewed and quality assured;
 - Items that are formally peer reviewed and quality assured; and
 - Exemplary items - these would be resources that have won Carrick or other formal institutional awards.
- On submitting a resource to the Carrick Exchange you identify whether you want your resource to be peer reviewed or not. If you initially choose not to have your resource peer reviewed you can opt at a later date for the resource to be peer reviewed.
- On submitting a resource to the Carrick Exchange you identify the individuals/groups that are able to provide commentary or feedback on your resource.

Appendix B: Focus group questionnaire

(Written responses were invited for the following. Questionnaires were completed during the focus groups.)

Engagement, Resource Contribution and Sharing

For each of the following repository design features, rate its importance to you (1 being most important and 5 least important)

Repository Design Features	Most Important				Least Important
	1	2	3	4	5
In the process of conducting an institutional database search, users have the ability to seamlessly/intuitively search the Carrick Exchange.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support from designated staff such as librarians to manage the copyright and intellectual property requirements for resources submitted to the Carrick Exchange.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regular updates, such as electronic newsletters which inform you of recent developments and contributions to the repository.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The information and facilities to be able to contact and communicate with the resource creator/s.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A space where you can store your 'work in progress' and invite others to give feedback on this work that could then assist in the development or finalization of the resource.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alerts to notify you when new items have been submitted in a particular area of interest or by a particular person.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details of various communities of practice, and the ability to contact members of these communities through the Carrick Exchange.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A communication area within the Carrick Exchange where issues can be raised and discussed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A database of high quality teaching materials catalogued according to a number of criteria including disciplinary and cross-disciplinary criteria.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there other features that should be included in the design of the Carrick Exchange?

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For each of the following repository contribution incentives, rate its importance to you, (1 being most important and 5 least important)

Repository Contribution Incentives	Most Important				Least Important
	1	2	3	4	5
If you were provided with reports about resources you submitted to the Carrick Exchange that you could then use these reports in promotion and tenure applications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If you were acknowledged as the creator of a resource each time it was reused.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If there was some sort of formal recognition of submissions you made to the Carrick Exchange such as awards.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If your university recognised and valued your contributions to the Carrick Exchange by providing you with time/funds, in the same way that time/funds are allocated for scholarly research.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If you received a grant to develop and share resources to the Carrick Exchange.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the only way you could access resources from the repository were if you first shared resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If you were acknowledged for your contributions to the Carrick Exchange in an online newsletter, at teaching and learning conferences or in other teaching and learning forums.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If you received financial remuneration for contributions made to the Carrick Exchange.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the Carrick Exchange could provide you with the necessary facilities to sell your teaching resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What do you see as the greatest disincentives for contributing or sharing resources to the Carrick Exchange?

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Summary of Significant Issues

Engagement

What do you see as the most significant issues for engaging the higher education sector with the Carrick Exchange?

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Resource Contribution and Sharing

What do you see as the most significant issues around contributing and sharing resources via the Carrick Exchange?

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Peer Review and Commentary

What do you see as the most significant issues in relation to peer review and commentary of resources for the Carrick Exchange?

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Appendix C: Sample comments

(This question was asked at the end of the Melbourne focus group. Some participants put forward more than one comment.)

Q: To conclude this discussion, can you each provide a brief comment about one issue that you think Carrick needs to take note of?

Competition from existing networks and repositories and modes of communication via the Net.

That **tension** between being democratic and inviting participation and peers and exchange etc from everybody, like the Wikipedia or MySpace model, to the more formal excluding certain things – meaning all the Carrick projects all the Carrick Fellows have spaces and that's what is available for comment and nothing else.

Defining what is the 'stuff' that will go on the Carrick Exchange and how they will ensure **quality**.

Copyright issues.

Having **teaching and learning tips and hints** would be more valuable to somebody than having wads and wads of resources. . . Tips and hints that could be commented on and value added to all the time.

Ease of use is crucial.

To get the disciplines involved you have to have a **discipline focus**.

Carrick has to live on well into the future as an institute and **brand name** . . . if that's changed it's going to undermine the Exchange.

There needs to be a very big **return on investment** in all these projects, as quickly as possible.

The Carrick Exchange has to assist in the real work that is undertaken by staff in universities, so it has to add to actual '**real stuff**' that people are doing on a day-to-day basis, and not be seen as something that is just an extra.

Have clearly **defined role**, purpose and elements to the Exchange and be aware of the danger of trying to be all things to all people.

The Carrick Exchange needs to be very much about **disseminating projects** and sustaining that in an ongoing way.

Need to know what **networks and tools** people are already using and how the Carrick Exchange would **interface** with that, and take a risk on new models and ways of communicating and in regard to the other aspects of the Carrick Exchange.

At a minimum the Carrick Exchange needs to have some **alignment** with the goals and funding of projects.

*It seems that there are some underlying tensions behind the **purpose** of the Exchange, and what are the models driving it. Is it about creating communities of practice? Is it about positioning teaching and learning in a scholarly way so that it can compete with the research quality framework? Is it about getting a whole raft of evidence-based practice that can underpin the future of teaching and learning? They are all different kinds of ways of thinking about dissemination, communication and change, so unless there is some clarity there then there will be the experience of those tensions.*

***Engagement** with academic staff is the key issue because without engaged academic staff there will be no content, no interest in using it or contributing to it and there will be nothing there. There is already one element for engaging academic staff and that is the Carrick grants, but those [staff] not coming in via this element need to be appropriately engaged, and that means some kind of recognition and rewards to engage them.*