Sharing pedagogical practice on the teaching of generic skills

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The Commonwealth supported *SkillCity* Project focussed on potentially cost effective and efficient ways to support staff to share teaching materials and insights online. This paper discusses what has been achieved in the Project - and the hurdles that remain - in creating an online resource to enable academics to teach 'generic skills.' Outcomes are discussed in view of the Australian academic context, where resources are stretched and heavy teaching and administrative loads are carried by staff. The paper addresses the Project's initial conceptualisation for online delivery of teaching materials for generic communication skills for groupwork and teamwork, the expected challenges in getting lecturers to adopt these materials, and the equivocal impact to date of this attempt to move university lecturers into innovative practices 'beyond the comfort zone' for their own learning.

Keywords: SkillCity Project, communication, generic skills, staff development, online

Introduction

A great deal has been written in the past two decades on the potential use of online resources as a means of professional development for university lecturers. In addition, academic staff development in the past decade has included an emphasis on the area that is our focus, adoption of learning pedagogies that address not only disciplinary knowledge but a range of 'graduate attributes', including generic skills, like communication. The rise of this particular focus is accompanied by a shift in the roles of teaching staff from merely providing information to creating learning environments for students to engage in resource based and student centred learning (Barr & Tagg, 1995). Enabling lecturers to access online insights and materials for such teaching seems like a natural step. However, employment of the Web for many lecturers, not only for their teaching but for their own learning, represents a shift from established comfort zones. A range of anecdotal evidence - and our experiences on the project described here - suggests that lecturers tend to restrict their engagement with the Web to searches for discipline specific materials. It can be argued that this restriction inhibits a lecturer's capacity to find and adopt materials on generic skills and ultimately to address them in their teaching. This paper describes our team's Commonwealth funded experiment in the use of the Web for the sharing of teaching resources for generic skills in higher education via development of the website, *SkillCity*.

We begin with a description of the *SkillCity* website, the aims behind its development, and what has been accomplished to date. These aims and accomplishments for what can be called the *'SkillCity* experiment' make sense in the context of recognised constraints for getting academics to employ online resources, constraints such as workload, time, and recognition. The middle portion of this paper addresses how well the design of *SkillCity* addresses the challenges that the literature would suggest that we were facing. This assessment is based on observed usage of *SkillCity*. The latter portion of the paper adds to this assessment insights gleaned from a survey of *SkillCity's* initial users. Conclusions are drawn that suggest that design features for such online resources cannot alone foster wide usage of a staff development website if the workload, time, and recognition constraints of the academic environment are too tight.

SkillCity: A resource for lecturers

The *SkillCity* website was developed as part of a project to enable lecturers to share communication skill materials and teaching resources. The "Communication Skills" Project represented a collaborative effort

that began with staff at ten universities working to enhance students' professional communication skills by employing flexible delivery for staff development.

The Project team were funded by a major grant from the Commonwealth Government through what is now referred to as the Australian Universities Teaching Committee (CUTSD, 1999). The effort was inspired by the realisation that, although communication skills are strongly desired by employers of new graduates, very few lecturers focus systematically on enhancing these skills. The Project was proposed to develop a website and peer network to provide lecturers with easy access to an abundance of teaching materials on communication skills. These materials would be tested and peer reviewed by the lecturers themselves and tailored to be suitable for each discipline and student level. Essentially, lecturers would use a website to submit, share, and peer review resources for the teaching of generic skills and in so doing form an online community. This effort led to development of the *SkillCity* website - http://skillcity.iaaf.uwa.edu.au/.

The *SkillCity* website fulfils two functions. Firstly, it provides an accessible, easy to use database of resources for staff in higher education. Secondly, it extends the teaching learning paradigm by enabling staff to create pedagogically sound instruction in new ways. The Website takes into consideration the needs of busy academic staff by providing resources that are learner centred and that can be embedded readily in online or classroom assignments. As staff access and use these tools, they are engaging in a form of professional development by evaluating, adapting, and using teaching resources that have been developed in other contexts.

The Project's original proposal offered the following three integrated outcomes:

- Form networks of 'early adopter' lecturers in a range of disciplines to test and provide reviews of materials and teaching strategies to enhance students' professional communication skills;
- Modularise these communication skill materials and teaching strategies into ready to use formats, tailored for specific disciplines, and accompanied by reviews by lecturers in those disciplines; and
- Establish on the web a database to contain these materials and strategies and publicise them via hot links in broadcast email messages and icons on lecturers' computer screens.

An overarching aim remained constant during the life of the Project, that was to explore ways to get lecturers, initially in the business and commerce disciplines, to consult the *SkillCity* site for materials to assist in developing students' teamwork and group work skills, as a model for sharing materials in other generic skills areas. In other words, the effort has been an experiment of a strategy for getting lecturers to address generic skills in a concerted way by participating in an online community whose members donate, review, and adopt modularised teaching materials.

The Project initially involved considerable energy and coordination among the distributed team members. These efforts were focussed on producing the following outcomes:

- diverse types of professional communications skills teaching materials;
- ways of writing up and presenting the materials so that they would be useable by others;
- ways of arranging and sorting materials on a website;
- methods for getting materials reviewed by lecturers so that visitors to the Website could identify what
 is relevant to them and transferable to their context; and
- methods for enabling lecturers to become involved in the submission, review, and use of both the review processes and the teaching materials.

The Project began with professional communication skills necessary in group work and teamwork for lecturers in Commerce and Business and then expanded into other communication skill areas and other disciplines. The Project integrated the collaborators' efforts on previous and current university funded and CUTSD funded projects in related areas. The approach of lecturer networks and flexible delivery of teaching resources was intended be used as a model for aiding lecturers in taking a developmental approach to imbuing students with other 'graduate attributes', such as problem solving and lifelong learning.

The project is now in its seventh year, the fifth year after Commonwealth funding was granted, and the third year since the *SkillCity* website's most recent reincarnation. The site contains over eighty

submissions, ranging from single handouts providing guidance for students on how to handle teamwork to plans for major assignments and reviews of university staff development websites. Submissions and reviews have involved over fifty academics, including noted authors, Graham Gibbs from the UK and Barbara Millis from the US. *SkillCity* has been launched in the UK, and a launch in the US is scheduled once minor refinements suggested by UK and Australian users are incorporated.

Fundamental hurdles facing online teaching resources in higher education

A series of challenges faced us in this project. First, how well do lecturers in higher education integrate Information and Communication Technologies (ICT) into their preparation for teaching? Many universities have tried to overcome the barriers to integration of ICT through approaches to policy, quality assurance and evaluation, and staff development (Dearn, Fraser & Ryan, 2002). These efforts, along with programmes for academic staff development addressing both theory and practice in higher education, seem to face similar hurdles. Challenges specific to the use by academic staff of ICT online teaching and learning resources have been reported in the literature, salient examples including:

- high workload (McNaught, Phillips, Rossiter, & Winn, 2000; Dean, Fraser, & Ryan, 2002);
- lack of time (Hansen & Salter, 2001; Gruba, 2001); and
- lack of adequate recognition and rewards (Alexander & McKenzie, 1998).

In the face of such challenges, the Wold Wide Web nevertheless has caused significant interest from educators in relation to its potential for sharing educational resources and learning objects in order to achieve economies of scale. The *SkillCity* website has demonstrated that this kind of resource sharing is possible and feasible among lecturers. However, our experience also illustrates how such adoption is constrained by the very factors outlined in the literature, as we will describe later.

SkillCity within the spectrum of online teaching resources

SkillCity can be viewed as a resource for staff development, enabling university lecturers to access resources that may extend their existing repertoire of teaching approaches. However, the literature suggests that it also falls short in some areas.

A range of strategies for embedding learning technologies into higher education teaching and learning are revealed in the literature. Most involve institution wide support for professional development, with varying models recommended or shown to be effective in certain circumstances. These models have much in common, such as the need for collaboration and consultation, a combination of top down and bottom up strategies, and the need for a variety of staff development initiatives to meet different and changing needs.

Dearn *et al* (2002) see the professionalisation of teaching in higher education to be the key to improving university teaching. They recommend several staff development initiatives to foster this professionalisation:

- Required formal, accredited lecturer preparation for new lecturers;
- Support for existing staff to undertake an award course in teaching;
- That sessional staff be expected to undertake 'a minimal level' of teaching preparation; and
- Ongoing professional development 'as part of the overall quality assurance system for Australian higher education' (Dearn *et al*, 2002, p. vi).

Reid (2002) reviews several models for the delivery of staff development and recommends an integrated model, based on a theory of conceptual change (in regard to teaching). In this model, staff developers from central units and academic lecturers in departments collaborate to provide appropriate staff development in teaching for all levels of need in any department. Reid also concludes that, while there are many effective approaches to staff development, 'a focus on conceptual change related to teaching and learning within a specific discipline context, whatever the approach, is important'.

Samsonov & Beard (2003) suggest that embedding technology in learning and teaching must be mediated through the 'local change environment'. A key to the effectiveness and acceptance by teaching staff of this approach is that it is developed in consultation with local managers. It is thus likely to be aligned with the department/school and the university's strategic directions. Dooley (1999) emphasises the effectiveness of consulting lecturers, as well, about their staff development and other needs in relation to the adoption of technological innovations.

In relation to these recommendations for 'embedding', the *SkillCity* site can be seen to provide a useful resource as the materials were developed *in situ* by lecturers working within particular disciplines. Furthermore, the materials can be seen as authentic and original. A challenge, though, is engagement of 'local managers,' like heads of school, who must encourage and support use of *SkillCity*, such use involving not only downloading materials but taking time to review them and to contribute original materials. It can argued that these aspects related to reviewing or writing up one's own materials, particularly case studies of use a teaching strategy, involve time that lecturers are not accustomed to investing in teaching. It is also readily apparent that this investment of time is something that heads of unit are not used to granting or accounting for.

The higher education literature has recognised the growth of collections of case studies, or examples of successful practice, both paper based and electronic, covering many different aspects of higher education (Ottewill, Shepherd, & Fill, 2002). In such collections, it is advised that users should critically appraise the nature and format of the cases that comprise a particular collection (Ottewill, Shepherd, & Fill, 2002, 53). *SkillCity* could be categorised as a case study type of online resource as it is essentially a distillation of professional practice that is meant to help fuel professional development for university lecturers. *SkillCity* has the capacity to capture such appraisals through its 'review' function for specific materials and bulletin boards for broader discussions. While a number of the resources in *SkillCity* have been commented on by peers, few have been through a rigorous process of editing and refinement. Similarly, few bulletin board exchanges have been undertaken by *SkillCity's* users.

According to Ottewill et al (2002), case studies need to be:

- Sharply focused and self contained in their treatment of pedagogy;
- Provide a varied set of examples of educational topics/episodes/incidents;
- Contain elements of narrative or story telling; and
- Reflect the close involvement and identification of the contributors.

The resources in *SkillCity* were not sharply focused on particular pedagogies but were generic and student centred in nature. While providing a varied set of resources, they usually do not contain narrative or story telling elements. Contributors were involved in reviewing and submitting resources, but there was never the expectation that the Project alone would change teaching practice, but rather act as a resource to help enable such change instigated by an increasingly well resourced set of 'early adopter' lecturers.

Some of the limitations taken by *SkillCity's* approach are shared by other examples of electronic collections of case studies, such as *ASTER*: investigating the use of electronic resources for small groups teaching in higher education: http://cti-psy.york.ac.uk/aster/ and *OTiS*: Online tutoring skills: preparing staff to act as tutors in the growing competitive global education economy: http://otis.scotcit.ac.uk/

In these resources, there is an emphasis on empiricism and little or no theory is provided. The aim has less to do with changing practice than with providing examples of current practice.

Despite such limitations, online resources have value for practitioners in higher education, including the following:

- arouse curiosity about other methods of learner support;
- disseminate good practice;
- focus on examples of 'how others have done it' within their institutions;
- trigger ideas and stimulate discussion, and perhaps reflective practice;
- provide rich descriptions of varied learning experiences for students; and
- provide scope for open ended interpretation of resources.

Thus, it can be seen that *SkillCity*, among other online teaching resources, offers promise to assist lecturers in some respects. However, it falls short in providing the quality of information that the literature argues is necessary for changing lecturers' teaching practices.

Fostering a 'learning community' online

It was hoped that the interactivity promised by *SkillCity's* functionality would help to foster an online 'learning community' or community of practice and network of practitioners. The thrust behind learning communities lies in recent research on situated cognition and social cultural psychology. Such works point to the immense value of community based learning as something that both reflects and alters dispositions and ways of seeing by practitioners at work. Many online learning communities of practice reflect constructivism, where collective theory building and the pursuit of knowledge occur. Members of the community are constantly in pursuit of extending boundaries in their understanding of the practice or discipline. These practitioners do not work in solitude, and their work revolves around real world demands and issues. Similarly, teaching is not merely an 'academic exercise' but a means towards finding practical and informed solutions to matters that have implications for society and others (Bain, 1999).

Research indicates that for a thriving and successful online community, several conditions must be met. For example, members of a community need to be able interact with each other in both a synchronous and asynchronous fashion by means of appropriately designed conferencing facilities, electronic mail, and web based resources. *SkillCity* provides only a modicum of such an infrastructure, bulletin boards, for example. Even the bulletin boards, though, have not been used significantly. An online chatroom facility was in version 1 of *SkillCity*, but it was dropped from version 2 due to pessimism about the potential level of use due to time and workload constraints on lecturers. Email exchange between those considering adopting materials on the site and the donors of such materials is enabled by a listing of donor's email address on the summary card for each item. However, experience to date is that adopter donor interchanges by email occur rarely.

Such limitations in design may reflect the realities of the academic world in Australia. It is not clear that a website that is fully technically equipped to support a learning community that crosses significant disciplinary boundaries would indeed foster one. Will academic staff take the time for the online involvement required to foster 'community'? Experience suggests not. One of the co-authors has alternately attempted to use and avoided a very sophisticated website that was specially designed for sharing materials and fostering dialogue. That site is now being much simplified following minimal use by lecturers.

One can argue that because *SkillCity* does not supply key ingredients of a learning community, either in terms of its infrastructure or the prospect of support for an ongoing community 'growth mechanism', it has not as yet developed as a full and effective learning community. However, the level of involvement for a learning community may not be possible for academics in the current context with the current technologies available. What these competing constraints leave us with is a sort of 'chicken and egg' problem. How ready are off line academics willing to spend an increasing amount of time online developing a sense of community (the 'chicken') given the state of the art - meaning the current complexity - in web support for such communities of practice (the 'egg')? Insights into this dilemma were revealed by our evaluation of *SkillCity's* impact on users.

Evaluation of the project in the eyes of contributors and users

Recent evaluation of the *SkillCity* experiment involved a broad survey that reached across the universities involved in the Project. It sought the views of active contributors to the site along with other participants. Some of the latter may have had to withdraw due to time limitations and work pressures or may have had difficulty becoming (or remaining) engaged with the Project for other reasons. Topics addressed in the evaluation process included:

- The design and useability of the Website and user interface.
- The conceptualisation of how generic communication skills for groupwork and teamwork were designed for online delivery; *i.e.*, evaluating the formats for presenting the materials online and the methods for accessing the materials.

- The extent to which a collaborative network of staff from different universities was formed
- Feedback from staff who contributed materials.
- Feedback from university staff who may have used the site related to the 'conceptualisation' point above.
- Recommendations for enhancing use of the site, further development, and methods of continual updating for the site.

Table 1 shows a summary of the evaluation process and methods of data collection.

Table 1: Types of data and collection processes

Evaluation focus	Data type	Method of collection
Literature review – state of	Current literature on online teaching	Literature search and review
the art in this sort of	resources and engagement with generic	
undertaking	skills by discipline based lecturers	
Interface & navigation	Web design team's views on design	Employ feedback from Project
features - desires, resulting	negotiations and resulting functionality	coordinator, interview WA
design, methods of academic		based team
web designer collaboration		
Team members writing	Feedback, comments, recommendations	Compile existing feedback data
materials - the contributors'	about extracting, composing, submitting	from Project coordinators,
views	process	conduct email survey
University lecturers using the	Relevance of the site to developing teaching	Seek existing data; survey
site	strategies and methods for communication	Project participants on use
	skills	patterns for selves & colleagues
Major achievements	Conferences, related publications, impacts	Seek existing data, liaise with
	on teaching	project coordinator
Next steps: the future of	Views of team members, interviews with	Interviews, in person, by phone,
SkillCity	those who run somewhat similar websites	online
	and staff developers concerned with generic	
	skills	

The evaluation consisted of a triangulated mix of information and feedback about the processes and outcomes of the Project. Several perspectives informed the evaluation, reflecting the contributions of project members, contributing lecturers, project manager and website developer. Instruments used to collect data were semi-structured telephone interviews, survey instruments, and usage statistics for the Website. In addition, formative feedback gained throughout the Project by the project officers was integrated in the final recommendations.

The *SkillCity* Project can be reviewed from many of the perspectives discussed in the preceding sections of this paper, including:

- Provision of online resources for academic staff in higher education;
- Fostering graduate attributes and generic skills across the disciplines, using lecturer centered
 approaches; and
- Creating a "community of practice" among lecturers, so that resources can be shared and conversations can take place about best practice in fostering graduate attributes.

One can also reflect on the Project in terms of meta-lessons learnt, which can inform similar undertakings in the future. Despite academics having large workloads and a shortage of time, the site provides support for a key initiative that is currently taking place in Australia; *i.e.*, embedding of graduate attributes into the curriculum, into assessment, and into interdisciplinary teaching initiatives.

Reported outcomes, limitations, and implications

Participants and team members were appreciative and positive about the outcomes achieved by the Project and about the final design of the interface. Most confirmed that they would recommend the Website to colleagues as a useful resource. The major contributions of the Project were regarded as follows:

- An easily accessible resource site for lecturers in higher education;
- A flexible, online form of staff development;
- An approach to interdisciplinary teaching of graduate attributes;
- A lecturer centred, developmental approach to supporting students' transferable skills;
- A project that makes exemplary use of the web for dissemination of teaching strategies; and
- Possibilities for networking across the university sector.

Limitations of the Project were perceived to be the need for more teaching strategies and for guidelines on how to assess these strategies; and the lack to date of evaluation and feedback from students and lecturers on the success or otherwise of the strategies presented. The most significant positive comments were that the materials were useful, relevant and supportive of generic skills development in an interdisciplinary context and that the format of presentation was accessible and clear. Some comments made were as follows:

The aim of this project was to produce some solutions for busy lecturers and I think it has succeeded reasonably well... it s good to be able to share ideas

I think there needs to be more of everything. Writing is one area in particular that needs to be developed.

Materials are fairly generic and can be adapted to all disciplines.

The biggest contribution of the project has been to create an easily accessible resource archive.

One of the major shortcomings of the project was the lack of cohesion among the participating universities. Everybody had different opinions on how to operate the project.

Online resources for lecturers are an effective means of professional development and this was the intention of the project and the way of the future. It really made to think of future possibilities

Staff from many different disciplines may incorporate these teaching strategies but with modifications.

Certainly, the evaluations conducted of the Project and the data collected indicate that the Website was successful in some, but not all, of the intended outcomes. The Project has acted as a site for dissemination of good practice and pedagogy and provided a window into the strategies for developing generic skills in students. However, it has not as yet provided any feedback or insights into how students experienced these resources or teaching strategies (though such feedback has been elicited by email). This lack of comment on student impact occurs even though the capacity to comment on how an activity was received was designed into the site from the outset via the 'review this material' function available for each piece of teaching material on the site.

As the site is up and running, it can stand as an example of what has been achieved in offering tertiary educators an online resource that can be explored as a source of new pedagogical ideas. However, unless further funds are provided to support ongoing revision and additional resources, the materials might soon be perceived as outdated, as some participants fear. A possible future direction to ensure the ongoing life of the Website would be to approach some participating universities to host the site on their server and to allow additional contributions to the site to be reviewed and added. This measure would prolong the life of the Project and ensure that the site retains its currency. Another option would be to have the site adopted by discipline based online communities, as exchange of teaching resources seems much more rapid within disciplines than across disciplines. A microbiology education listserv is one example of such a community. The irony here is that one would then have 'generic' skills materials being shared as 'discipline based' materials, a move that undercuts the notion of 'generic'. A further option is to have *SkillCity* serve as a learning object within other compilations of online materials, such as the US based website, MERLOT (www.merlot.org).

Conclusions: Functionality bounded by institutional context

Many efforts have been made to build online communities and communities of practice practice as a way to attempt to foster certain types of changes in practice - in this case, getting university lecturers to address communication skills in a more concerted manner. However, most fail as they do not recognise the changing and evolving nature of participants and context. In the case of *SkillCity*, participants in the project changed workplace, jobs and locations while the project was in progress. In addition, momentum and time were lost as team members primarily worked independently in developing resources for the site rather than travelling or employing online facilities to develop these materials collaboratively.

Issues such as time scales (eg., university teaching semesters), the pressures on university lecturers, workload and the evolving context of higher education in Australia need to be considered if the aim is to achieve and support a dynamic learning community. Participants in this project undertook the creation of resources for SkillCity as an additional task without time release or support from their individual institutions (though some had a modest amount research assistance). While there was a lot of goodwill generated, the current pressures in higher education in Australia mean that academics receive little time, travel funds, or recognition for discussing and sharing quality teaching resources. The lack of acknowledgement was heightened in this project by the fact that the effort was across universities and across disciplines, whereas reward structures tend to be within universities and within disciplines. According to Reid (2002, p9) "The scholarly nature of the work involved in developing quality in teaching and learning needs to be recognised as legitimate academic work."

It could be concluded that academics were unable to participate as fully as would have been desired in the Project due to lack of time, lack of recognition, and inadequate opportunity to share expertise with others. Nevertheless, the Project has achieved a range of successful outcomes. For example, *SkillCity* provides a model for aspects of website functionality that are tailored to the needs and preferences of university staff across a range of disciplines, as contributors and users have testified. Finally, the effort has generated considerable energy among participants that has shifted the boundaries of their thinking with respect to sharing teaching strategies.

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