"Too Hard, Too Busy": A Case Study in Overcoming These Barriers to Online Teaching

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Abstract: The adoption and integration of online learning and teaching in higher education is becoming increasingly important in our rapidly changing digital society. While many teachers and academics acknowledge the importance of adapting their own teaching practice to this new approach, knowing how and where to get started can be a daunting task for many.

There is an overwhelming amount of professional development information regarding online teaching available to educators through workshops, the Internet, books, technical demonstrations and academic papers. However time-poor teachers often find it difficult to invest time and effort into attending workshops, or analysing available theory and research (McIntyre 2011) to derive online teaching approaches relevant to their own situations.

Similarly, many teachers first embarking on a new online initiative can find it an isolating and frustrating experience, with limited peer support (Bennett, Priest and Macpherson 1999) and practical pedagogical guidance while 'learning the ropes' or preparing course curriculum.

So what approach can be taken to firstly connect with these teachers at the 'coalface,' and then support them through their initial investigations and subsequent development of online teaching practice?

In 2009, COFA Online at The University of New South Wales won funding from the Australian Learning and Teaching Council (ALTC) Competitive Grant Scheme for a project called *Learning to Teach Online (LTTO): Developing high-quality video and text resources to help educators teach online* http://bit.ly/d18ac5. The project's aim was to produce a set of resources to enable more educators, particularly those with no online experience, to successfully adopt and develop online teaching practices, and to reach a diverse audience of teachers across different disciplines and institutions throughout the world.

This paper discusses the strategies adopted by the LTTO Project to ensure the resources focused on pedagogy and were perceived as pragmatic, easy to use and readily adaptable. It also outlines how the adoption of social media as a dissemination method facilitated easy access to the resources by a wide audience of teachers both with and without online teaching experience, and promoted greater awareness and uptake across disciplines and institutions around the world. It demonstrates, through summative and formative evaluations, how this approach effectively encouraged teachers to get started with their online teaching and stimulated their interest in further research on the topic.

Keywords/Key Phrases: pedagogy, e-Learning adoption, online teaching, time-poor teachers, collegial support

1. **Background**

COFA Online is an online learning unit at the College of Fine Arts (COFA), The University of New South Wales (UNSW) in Sydney Australia. COFA Online has a successful track record for delivering professional development resources and online courses since 2003. During this time, COFA Online has developed, applied and evaluated face-to-face pedagogically focused professional development programs for teachers wishing to start online teaching (McIntyre 2001). These programs typically included groups of approximately 10 participants and ran as a series of monthly workshops over a semester, 'enabling educators from UNSW as well as other Sydney universities to develop their online curricula and teaching practices'. (McIntyre 2011)

While very successful, the programs had limitations since they could only train a small number of educators at any one time in a specific location, and at 6 months duration were considered time consuming. They also focused primarily on Art and Design. During this time, COFA Online was

increasingly being approached by other faculties, institutions and industries to conduct more professional development programs, as well as by individual teachers asking for help to get started in online teaching. It became apparent that a new method of reaching a larger audience was required to build upon the practical and theoretical knowledge and experience gained from these face-to-face programs (McIntyre 2011) and in so doing, address some of these issues. As a result, in 2009 COFA Online applied for funding from the ALTC for the 'Learning to Teach Online (LTTO) Project. http://bit.ly/d18ac5.

The project's aim was to produce a set of resources to enable more educators to adopt and develop online teaching practices across different disciplines and institutions throughout the world. This paper focuses more specifically on the strategies used to reach and engage teachers often situated at the coalface of teaching who were too busy or found adopting online teaching too hard.

In order to understand how best to approach and develop strategies to encourage this, it was important to first understand the context and identify the barriers faced by these teachers.

2. Context and barriers faced

The main barriers were identified as follows:

2.1 Time-poor teachers
Teachers' concerns about the additional time and effort associated with online teaching are well documented (Shea, Pickett and Li 2005), and they remain one of the main stumbling blocks to adopting online teaching practices. Many teachers are aware of the substantial amount of time required to attend training sessions, to develop online courses, as well as to teach in them (Herrington, Reeves and Oliver 2005, Shea, Pickett and Li 2005).

Engaging educators that are time poor and overworked (Hannon 2008) can be difficult as they divide their time between various commitments (Ellis and Phelps 2000), and feel overwhelmed by the increasing demands on their time (Slay 1999). This is particularly evident when there are inconsistencies between an institution's goal and policies regarding online teaching and the level of pedagogical support (McIntyre 2011) and funding offered in order to achieve these goals.

Equally challenging is reaching the high proportion of casual or sessional staff commonly employed in higher education. While these teachers are typically at the coalface and in close contact with students, they are often unable to attend or are excluded from the institution's professional development programs and training opportunities that are offered to more permanent staff (Rice 2004).

2.2 Peer and collegial support
Literature suggests that teachers prefer to learn alongside other teachers and learn from their experiences (Ertmer Addison Lane Ross and Woods 1999) and as such peer support can be regarded as a key factor in initiating and assisting the adoption of online teaching (Covington Petheridge and Egan 2005).

Yet training in online teaching is often conducted through a series of workshops, seminars or lectures offered by the institution's Learning and Teaching units, and are limited in their ability to offer the day to day collegial support that encourages the transfer of learning (Rabak and Cleveland-Innes 2006) and sharing of expertise specific to their teaching situation or discipline.

While many teachers have developed valuable skills and experience in online teaching, they tend to work in isolation, thereby limiting the transference of their expertise to their colleagues. (Bennett, Priest and Macpherson 1999). This can leave teachers new to online teaching feeling isolated and not knowing where to go for help.

2.2 Relevance, authenticity and the application of practical knowledge relevant to the educators' own situation.
While there is a large amount of information and knowledge available through workshops, seminars, the Internet etc, knowing how to 'quickly and effectively apply these approaches to their own individual circumstances and skill levels' (McIntyre 2011) can be a difficult and frustrating experience for

teachers. Information can either be too technology focused and software specific, or alternatively too theoretical and lacking in practical pedagogical guidance. In some instances the information or online teaching experience is 'sugar coated' (Bennett 1999) and fails to provide the balanced view associated with an authentic teaching experience.

Group training sessions are not always able to acknowledge the different abilities, level of experience, needs and teaching styles of various teachers. For teachers with little online experience, it is difficult to judge - before committing time to attend these sessions- what resources or programs may be useful and appropriate to their teaching situation.

In addition, the technical and computer jargon associated with online teaching can be confusing, in many cases reinforcing feelings of inadequacy and resistance. This further alienates any connections between a teacher's existing face-to-face teaching practices and those of online teaching (Bennett 1999).

3. Strategies adopted by the LTTO Project to overcome these barriers

Based on this investigation of context, literature, and COFA Online's previous research and experience in professional development programs, the LTTO Project adopted the following approaches and strategies to address these barriers:

3.1 Time-poor teachers
To address the issue of lack of time experienced by many teachers, the resources needed to be pedagogy focused, pragmatic, easy to use, easily accessible, modular or available in 'bite size pieces.' To engage busy teachers searching for information, the resources needed to be succinct and well edited, and accurately describe the nature of the content upfront. To remain relevant and useful, all resources produced by LTTO needed to allow for the rapidly changing and obsolescent nature of online platforms and new technologies by being modular, interchangeable and easily replaced or updated.

3.2 Authenticity and application of practical knowledge
To promote authenticity and encourage the application of practical knowledge, it was decided that the LTTO resources needed to include real-life case studies, examples and opinions from experienced educators from many different institutions and disciplines. It was important that this information offered a balanced view of their experiences and included useful strategies to allow teachers to easily adapt the information to their own situations. It was considered important that the resources be professionally formatted and presented to stand apart from the more informal, less stringently edited information readily available on the Internet.

3.3 Peer and collegial support
It was envisaged that this sharing of information and advice, in an easily digestible and adaptable format would facilitate the transfer of knowledge associated with peer support, and encourage teachers to try smaller, less threatening aspects of online teaching. It was also decided that establishing an online forum linked to the LTTO project website might allow educators the opportunity to discuss aspects of the resources or seek further peer support and guidance.

3.4 Accessibility of resources
It was decided that to ensure the resources were easily accessible, they should be offered free of charge (this was also a condition of the project funding); be readily available through a variety of well known channels (such as YouTube, iTunes U, the COFA Online Gateway Website and UNSWTV); be easily downloadable by not requiring excessive bandwidth; and be appropriate for viewing on smaller devices such as mobile phones and iPods.

4. Format adopted for the LTTO Project resources to implement these strategies

The decision to produce a series of downloadable online resources in a modular 'episodes' format would encourage autonomous self development (Lewis 2006) by allowing teachers to select and access information that was relevant or of interest to them, and to then use these resources in their own time, at their own pace, and according to their existing skill or ability level. It would also allow the

project team to add more episodes on an ongoing basis, or to remove any that were superseded or where the technology was no longer relevant or appropriate.

Each episode would comprise of a short video of about 5-9 minutes in length and a supporting written PDF document. It was decided to combine both types of resources in each episode to accommodate the different learning styles of the teachers using them, and to scaffold the complexity of the information presented (McIntyre 2011). The videos would have a more collegial conversational tone and introduce the viewer to the concepts in the episode, and the PDF document would include greater depth of content and serve as a practical, downloadable or printable document for later reference. The PDF would also offer useful links, suggestions for additional reading and useful tips to encourage further research by the teacher.

To accommodate a broad range of opinions and voices, 53 academics and 14 students were interviewed. They represented 18 different disciplines from 18 universities in Australia, the UK and Switzerland. http://online.cofa.unsw.edu.au/learning-to-teach-online/whos-been-interviewed

To ensure the videos were of a professional quality, the project team engaged a video production unit for filming and editing. To ensure the nature of the content and purpose of each episode was immediately apparent, the titles of episodes were kept deliberately succinct, and each video and PDF commenced with a brief summary of the content that the viewer would find within. This would allow teachers to quickly assess whether the information was relevant or of interest to them.

4.1 Episodes

The collection of episodes were divided into 3 categories:

4.1.1 Context Planning and Teaching
This series of episodes covered different pedagogical themes considered relevant to online teaching and addressed some of the common questions and concerns. Examples included topics such as 'Engaging and motivating students' http://bit.ly/ijlL3g, 'Planning an online class' http://bit.ly/gFPzbN, 'Managing your time online' http://bit.ly/cnzReG 'Learning management system or the Open Web?' http://bit.ly/aL55Yj, and 'Conducting effective online discussions' http://bit.ly/fhEFBn. These episodes included a large number of interviews and opinions from a broad range of experienced academics, academic support staff, students and learning and teaching professionals from many different institutions and disciplines. This approach provided a more wholistic and balanced representation of online teaching, rather than just the views of the LTTO Project team.

4.1.2 Case Studies

These episodes each featured an example of best practice and detailed one teacher's pedagogical approach to their online teaching practice. Examples included 'Using Flickr as an online classroom' http://bit.ly/989e9Y, 'Using ePortfolios as a reflective teaching tool' http://bit.ly/koVNA2, 'Using audio feedback' http://bit.ly/bobJOD, 'Using blogs for peer feedback and discussion' http://bit.ly/bH53dD amongst others . In the video, teachers discussed the reasons for their approach, the strategies adopted for planning and teaching the course, the benefits of the online approach, and importantly, any difficulties or challenges faced and how these were overcome. In addition, the case studies included useful screen capture demonstrations of the online teaching environment used by each teacher. Wherever possible, students' opinions were also included to represent a balanced perspective of the learning experience.

It was hoped that this conversational tone would reinforce collegial support and that the practicalities and balanced views of the case studies would serve as peer encouragement to motivate teachers to overcome their reluctance to online teaching.

4.1.3 Technical Glossary

These episodes provide a quick start-up and support guide to some of the software discussed in the case studies. While the focus of the LTTO project is primarily about online pedagogy, it was considered important to provide a pragmatic reference within which these pedagogies could be applied. Examples include 'Recording Audio in Audacity' http://bit.ly/gbjSYZ, 'Setting up a simple blog

in Blogger' http://bit.ly/lWuQ1x, and 'Twitter Basics' http://bit.ly/hHGiwQ.

As a result of this format, a total of 32 episodes were produced and released progressively over an 8 month period. This gradual release allowed the project team to improve and respond to direct feedback for subsequent episodes, and helped sustain ongoing interest in the project.

4.2 Dissemination and accessibility of resources

The episode dissemination strategy was based on the understanding that a single website dedicated to the project could only draw limited attention to itself, and that the users – who in many cases would be busy teachers - could only find the website by chance or via a specific web search. Traditional, non-digital promotion would be time consuming and limited in whom it would target, and thus a more contemporary web 2.0 inspired approach was adopted (McIntyre 2011). It was believed that the resources would have far greater reach, awareness and accessibility if disseminated into as many different and regularly frequented online formats and social media groups as possible. This would also have the potential for these communities to promote or refer the episodes to teachers with no online experience.

It also became evident early in the project that the community aspect of the LTTO Forum did not have the interest and uptake as anticipated, and it was decided that it would be more beneficial to share the episodes with existing online communities rather than compete or maintain a dedicated LTTO Forum.

As a result, the following dissemination mechanisms were utilised:

4.2.1 Integrated online dissemination system
Episodes were uploaded into UNSW TV and then automatically pushed to populate the Learning to Teach Online website, ITunes U and YouTube. While these were the only places where video content was hosted, users could freely embed videos in other websites (McIntyre 2011). This also ensured that the resources were easily accessible and that they could be downloaded in a variety of resolutions on several types of devices.

4.2.2 Open Educational Resources (OER)
These are international websites which share educational content produced by universities and are available to educators globally. Since these are reputable websites that feature educational content, teachers are more likely to search and use content featured here as opposed to more generic websites. LTTO episodes are located in MERLOT http://www.merlot.org, OER Commons http://bit.ly/lrTm8q , Jorum http://www.jorum.ac.uk and Scribd http://www.scribd.com

4.2.3 Existing online groups and organisations
These included established groups such as Academia http://bit.ly/14XITR and Classroom 2.0 http://www.classroom20.com

4.2.4 Social media
The project was actively promoted through tools such as Twitter, Facebook, and LinkedIn with the view that this would encourage more rapid and wider awareness of the resources.

4.2.5 Stakeholders
Universities and interviewees who contributed to the project were emailed links to the resources and asked to share them with colleagues and any educational networks that they actively contributed to.

4.2.6 Media
The project and project team were interviewed or featured by several Australian newspapers and University magazines.

5. Evaluation and feedback of the strategies and format adopted by LTTO in overcoming these barriers

Data relating to the dissemination and uptake of the project (such as the number of views of each episode, the country in which the viewers were located, links on websites to the project, embedding of videos, etc) was collected and recorded using Google Analytics, Google Alerts, YouTube, iTunes U and Twitter.

In addition, evaluation and feedback was conducted through a voluntary online anonymous survey linked to the episodes. To date, over 100 responses representing 34 disciplines across 26 countries have been recorded. Substantial unsolicited feedback was also received from users via emails, phone calls, educational blogs, online reviews, newsletters, websites and other social media.

The response has been overwhelming positive, and has far exceeded the aims of the project and the expectations of the project team. The number of views of the episodes, and the broad range of disciplines and locations of those viewing them, has been substantial. Importantly, the feedback indicates that the project has engaged many teachers and encouraged them to either start teaching online, or encouraged them to develop their existing practices. There has also been substantial uptake by learning and teaching units and professionals that have embedded the episodes into their professional development programs.

The success and impact of the strategies and format adopted in the LTTO Project to achieve these goals and overcome the barriers is outlined and discussed as follows:

5.1 Extent of dissemination and uptake across the world

At the time of writing:
- the episodes have received over 120,000 unique views from 136 countries and territories in 15 months
- 49 institutions in 7 countries have linked to the project
- 36 institutions in 9 countries are using the resources in their own professional development and educational programs

In addition to this, hundreds of educators have used social media such as twitter and blogs to discuss or promote the resources. The project was named the number one collection in the iTunes U Teaching and Education category for several weeks in 2011, and In December 2011 the Project received the 2011 Innovation and Excellence Award by the Australian Society for Computers in Learning in Tertiary Education (ASCILITE).

Overall, the statistics from Google Analytics and survey respondents indicate that users accessed or were referred to the LTTO episodes via the broad range of the dissemination strategies targeted by the project team. While some of these dissemination methods were more successful at different stages of the project (eg referrals via social media and education blogs were initially more prevalent, with institutions' websites and OER's becoming more dominant later in the project) it validated the project's multi-pronged dissemination approach in order to reach the maximum number of users, and in so doing have the potential to reach, directly and indirectly, teachers at the coalface with no online experience. It also supports the project team's decision to abandon the LTTO Forum in favour of accessing and maximizing the potential of already established and popular online communities and groups who had the potential to introduce the episodes to other teachers.

5.2 Reaching and engaging teachers with no online experience

Initial findings suggest that the project has succeeded in reaching teachers with no online experience. The online survey indicated that 45% or the respondents had no or less than one year of online teaching experience, and of the teachers that had no prior online experience, 75% of those indicated that the episodes had helped them get started with online teaching.

As the project progressed, many institutions' learning and teaching websites started linking to the LTTO project, and increasingly embedding the resources into their professional development programs. This timing corresponded with an increase in the number of teachers with no online teaching experience responding to the LTTO online survey. It suggested that while the LTTO project had

difficulty reaching these teachers directly through its online dissemination system (since many of these teachers were unlikely to use social media, blogs, etc), the project was able to do so via existing websites or institutions' learning and teaching units. The quote below illustrates this:

"These videos are excellent!! They provide actual examples of the benefits of online teaching by academics who have the experience. We're hoping to provide these as resources to our faculty who are just starting to teach online" (Anonymous)

5.3 Time, ease of use & accessibility

While the number of views of the episodes suggested that the project was accessible, easy to use and easily downloadable, this was further supported when The LTTO project was independently peer reviewed by international Open Education Resources MERLOT and awarded five stars out of five for *"Ease of Use for Both Students and Faculty."* http://bit.ly/zJyIBl

In the LTTO online survey, 96 % of respondents agreed that "the information within the videos and accompanying PDF files was engaging and easy to follow". The LTTO strategy for engaging busy teachers by developing modular, succinct and freely available episodes was verified in the survey with responses to a question about the user's perception of the most valuable aspect of the project:

"easy to watch, short snippets of information, loved the accent" (Anonymous)

"accessibility of getting instant information and watching/listening" (Anonymous)

"Being able to chose which episode interested me at any one moment (no-linear structure) according to my needs." (Anonymous)

"It's here, it's FREE information I have access to, and I don't have to travel around the world to get this valid, professional, and updated research that is still growing as I write…" (Anonymous)

5.4 Collegial support, conversational tone and advice of experienced teachers

The positive effect of providing collegial support and advice from experienced teachers was evident. 96% of respondents agreed that the conversational tone of the videos as well as the representation of different opinions of academics was effective and engaging, indicating in their feedback comments that the valuable aspects of the project were as follows:

"Collection of real "people" telling real stories :)" (Anonymous)

"The opinions of others as I was a little nervous" (Anonymous)

"Hearing from front line higher educators." (Anonymous)

"Sharing of information and advice at other universities..." (Anonymous)

"breadth of coverage, disparity of opinions of practitioners" (Anonymous)

The importance of representing a balanced 'warts and all' approach to the case studies, and the encouragement and reassurance it fosters is supported in statements such as:

"Seeing how things were done elsewhere, and adopting features of other projects to further our own. Even the idea that others out there were having the same ideas and difficulties is encouraging to keep working at improving our own work…" (Anonymous)

5.5 Authentic, pragmatic examples adaptable to own teaching

The project was regarded by users as being pragmatic and authentic in its content and presentation. MERLOT again awarded the resources a five star out of five rating for *"Potential Effectiveness as a Teaching Tool"*. 99% of the respondents of the survey agreed that "the content, strategies and ideas featured in the episodes were valuable and relevant" citing that some of the most valuable aspects were:

"Real examples rather than hypotheticals" (Anonymous)

"Practicality - the ideas are ready to use!" (Anonymous)

"The case studies. So much of what is available online is you can do this activity or try that activity, this worked really well with my students etc, but, in my opinion, it's the case studies here that teaching practitioners will connect with - plus the humanistic factor of seeing the person talking." (Anonymous)

The benefits of sharing information and strategies irrespective of discipline were supported by 99% of survey respondents agreeing that " The ideas, strategies and concepts from the different disciplines represented in the episodes were relevant and useful to me even though my discipline may have been different".

Of those surveyed, 96 % found the combination of PDF and video effective and useful with feedback such as:

"Very good videos and it was very helpful to have the option of downloading the pdf's for further resources." (Anonymous)

5.6 Professional, well edited format

The decision to employ professional video and editors proved worthwhile as the resources were regarded as high quality and were featured, embedded or adopted by many reputable OER's, institutions' websites and learning and teaching units.

"…these resources are far superior to what is typically found on YouTube. I'm actively promoting the home website for COF Online via my university resources and global social networks" (Anonymous)

"I am looking for resources and models to support faculty in our institution. I am impressed by the model you have developed. Thanks you for creating such a great resource: (Anonymous)

6. Conclusion

Both the summative and formative evaluations to date suggest that the LTTO project has been successful in its aim to produce a set of resources that would enable more educators from different disciplines and institutions around the world to adopt online teaching practices. Importantly, the issues identified by LTTO as barriers to engaging time poor educators at the coalface appear to have been overcome by the strategies implemented by the LTTO Project. It emphasises the need for practical, succinct, easy to use, accessible resources that offer collegial support and pragmatic strategies that teachers can readily adapt to their own situation. This approach encouraged busy teachers to engage with online teaching and stimulated their interest in further research on the topic.

As data collection and evaluation still continues, it is hoped that with the current inclusion of the LTTO resources in professional development programs by institutions around the world, the episodes would reach and engage a further number of teachers at the coalface who would not usually be aware of the resources.

While initial funding has limited the LTTO Project to 32 episodes, the project team is motivated to continue with the project to include more disciplines, institutions and examples of online teaching pedagogies.

Acknowledgements

References:

Bennett, S. Priest, A and Macpherson, C. (1999) *"Learning about online learning: An approach to staff development for university teachers"*, **Australian Journal of Educational Technology**, Vol 15, No. 3, pp 207 – 221
http://ascilite.org.au/ajet/ajet15/bennett.html

Covington, D., Petheridge, D and Warren, S. (2005) *"Best Practices: A Triangulated Support Approach in Transitioning Faculty to Online Teaching"*, **Online Journal of Distance Learning Administration**, Spring, Vol 8, No.1
https://www.westga.edu/~distance/ojdla/spring81/covington81.htm

Elliss, A. and Phelps, R (2000) *"Staff development for online delivery: A collaborative, team based action learning model"*, **Australian Journal of Educational Technology**, Vol 16, No. 1, pp 26-44
http://www.ascilite.org.au/ajet/ajet16/ellis.html

Ertmer, P., Addison, P., Lane, M., Ross, E and Woods, D. (1999) *"Examining Teacher's Beliefs about the Role of Technology in the Elementary Classroom"*, **Journal of Research on Computing in Education**, Vol 32, No. 1, pp 54 – 72
http://www.edci.purdue.edu/ertmer/docs/AECT05_ETUT_Proc.pdf

Hannon, J. (2008) *"Doing staff development: practices, dilemmas and technologies"*, **Australasian Journal of Educational Technology**, Vol 24, No.2, pp15-29
http://www.ascilite.org.au/ajet/ajet24/hannon.html

Herrington, J., Reeves, T. and Oliver, R. (2005) *"Online learning as information delivery: Digital myopia"*, **Journal of Interactive Learning Research**, Vol 16, No. 4, pp 353-367
http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1032&context=edupapers

Lewis, T. (2006) *"When teaching is Learning: A Personal Account of Learning to Teach Online"*, **The CALICO Journal,** Vol 23, No. 3, pp 581-600
http://oro.open.ac.uk/17139/

McIntyre, S. (2011) **Learning to Teach Online: Developing high-quality video and text resources to help educators teach online**, Australian Learning and Teaching Council, Sydney
http://online.cofa.unsw.edu.au/sites/default/files/CG9-1091_UNSW_McIntyre_Final_Report_2011.pdf

Rabak, L. and Cleveland-Innes, M. (2006) *"Acceptance and Resistance to Corporate E-Learning: A Case Study From the Retail Sector"*, **Journal of Distance Education**, Vol 21, No. 2, pp 115 – 134
http://www.tandfonline.com/doi/full/10.1080/08923647.2010.522919

Rice, M. (2004) *"Discomfort at the coalface: Issues for sessional tutors teaching in online enhanced learning environments"*, in Atkinson, R., McBeath, C., Jonas-Dwyer, D. and Phillips, (Eds), *Beyond the comfort zone: Proceedings of the 21st ASCILITE Conference* (pp. 798-801). Perth, Australia, 5-8 December. http://www.ascilite.org.au/conferences/perth04/procs/rice.html

Shea,P., Pickett, A and Li, C. (2005) *"Increasing access to Higher Education: A study of the diffusion of online teaching among 913 college faculty"*, **The International Review of Research in Open and Distance Learning**, Vol 6, No. 2
http://www.irrodl.org/index.php/irrodl/article/viewArticle/238/493U

Slay, J (1999) *"Creating an on-line learning environment: issues in academic staff development"*, Paper presented at AusWeb99 http://ausweb.scu.edu.au/aw99/papers/slay2/paper.html