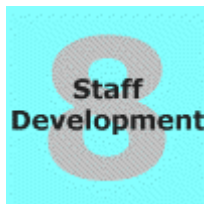




Online Tutoring e-Book

Editor Carol Higgison



Chapter 8 Staff Development

Carol Higgison, Heriot-Watt University, UK

Contact information

This document has been published by OTiS (the Online Tutoring Skills Project) based at:

The Institute for Computer Based Learning, Heriot-Watt University, Edinburgh, EH14 4AS
and The Centre for Open and Distance Learning, The Robert Gordon University, Schoolhill,
Aberdeen, AB10 1FR.

URL: <http://otis.scotcit.ac.uk/onlinebook/>

Date: August 2001

First edition

ISBN

Copyright

©2001 Heriot-Watt University, The Robert Gordon University and the original authors.

All rights reserved. Apart from fair dealing for the purposes of research or private study, or criticism or review, as permitted by the Copyright, Designs and Patent Act 1988, this publication or any part thereof may not be reproduced stored or transmitted in any form or by any means without the prior written consent of the publishers. Except that (a) for courses of instruction or distribution within UK higher education institutions this publication or parts thereof may be copied without charge, provided that the source and publisher's copyright are indicated in any such reproduction, (b) for courses of instruction by any of the participants in the Online Tutoring Skills e-Workshop this publication or parts thereof may be copied without charge, provided that the source and publisher's copyright are indicated in any such reproduction and (c) authors retain their personal right to re-use the material in future versions or collections of their own work.

Whilst every effort has been made to ensure the accuracy of the information in this book, the publishers wish to emphasise that they cannot accept any liability for any errors which remain. Further, the views expressed in each of the chapters are primarily those of the stated authors and whilst the publishers endorse the value of all the contributions, the views expressed are not necessarily those of the publishers. Please notify us of any factual errors, for correction in future editions.

OTiS (the Online Tutoring Skills Project) is funded by The Scottish Higher Education Funding Council under the ScotCIT Programme (<http://www.scotcit.ac.uk>).

Preface

Staff development is essential to ensure that staff have the necessary skills and expertise to become effective online tutors.

"... how to exploit learning technology to best advantage." (Banks-D, 2000c)

This chapter provides a framework and ideas for creating staff development programmes which meet the needs of online tutors in a flexible and scalable way. The ideas come from the OTiS Case Studies, the extremely active and informed e-workshop discussion on staff development and the subsequent contributions by colleagues in synthesising and structuring these ideas into a useful resource.

In particular my thanks to Sheena Banks for her excellent facilitation of the discussion and expert contributions, to the writing team of Sheena, Ludvig Eger and Melanie Glass for their synthesis of the contributions and to Susan Gilbert-Hunt for suggesting the structure.

The success of the e-workshop was due to the interest and enthusiasm of the participants and their generosity and willingness to share their experiences and expertise. We hope that the participants in the e-workshop agree that they became part of an active and supportive online learning community.

Carol Higgison
(editor)

The Online Tutoring Skills Project is funded by the Scottish Higher Education Funding Council.

Contents

<i>Preface</i>	<i>8.iii</i>
<i>Contents</i>	<i>8.iv</i>
1 Introduction	8.1
2 Institutional Support for Staff Development	8.2
2.1 Institutional context	8.2
2.1.1 Meeting institutional objectives.....	8.3
2.1.2 Models of staff development	8.3
2.1.3 Scalability.....	8.4
2.1.4 Identifying the development needs.....	8.4
2.1.5 Selection and development.....	8.6
2.2 Removing barriers	8.7
2.2.1 Lack of time.....	8.8
2.2.2 Lack of appropriate training.....	8.9
2.3 Motivating staff	8.10
2.4 The role of evaluation	8.11
2.5 Recommendations	8.12
3 Pedagogy vs Technology	8.13
3.1 Staff developers as agents of change	8.13
3.2 Technical skills	8.14
3.3 Information handling skills	8.16
3.4 Pedagogical understanding	8.16
3.5 Collaborative and communication skills	8.18
3.6 Recommendations	8.19
4 Core Components of Staff Development	8.20
4.1 A framework for skills development	8.20
4.2 Learning by experience	8.21
4.3 Mode of delivery	8.23
4.4 Support infrastructure	8.25
4.4.1 Developing the staff developers	8.26
4.4.2 Scaffolding the learning	8.26
4.4.3 Modelling good practice.....	8.27
4.4.4 Mentors.....	8.28
4.4.5 Peer support.....	8.29
4.4.6 Help systems.....	8.30
4.5 Resources	8.31
4.5.1 Online resources	8.31
4.5.2 Manuals	8.32
4.5.3 Templates and guidelines	8.32
4.6 Recommendations	8.32

5	<i>Examples of Staff Development Models</i>	8.34
5.1	Basic skills and awareness	8.35
5.1.1	Local workshops, local support.....	8.35
5.1.2	Online learning, local support.....	8.36
5.1.3	Online learning, scaling up.....	8.37
5.2	Competence and confidence	8.38
5.2.1	Changing practice.....	8.38
5.2.2	Changing pedagogy.....	8.40
5.2.3	Changing roles.....	8.42
5.3	Course design and delivery	8.44
5.3.1	Large scale training at a distance.....	8.44
5.3.2	Addressing institutional values.....	8.46
5.3.3	Beyond the course.....	8.48
5.3.4	Courses vs self-study.....	8.49
5.4	Recognition and accreditation	8.50
5.4.1	Web based teaching.....	8.50
5.4.2	Effective online tutoring.....	8.52
5.4.3	Technology based distributed learning.....	8.53
5.4.4	Learning to teach online.....	8.54
5.4.5	Online delivery.....	8.55
5.5	Continuing professional development	8.56
5.5.1	Action research.....	8.56
5.5.2	Reflective practice.....	8.56
5.6	Developing the staff developers	8.57
5.6.1	Professional development.....	8.58
5.6.2	Facilitating online staff development.....	8.59
5.7	Professional communities of practice	8.59
5.7.1	International collaborative teaching and learning.....	8.59
5.7.2	The OTiS e-workshop.....	8.60
5.8	Conclusion	8.62
6	<i>Executive Summary</i>	8.63
6.1	Institutional context	8.63
6.2	Pedagogy vs technology	8.63
6.3	Core components of staff development	8.64
6.4	Examples of staff development models	8.64
	<i>Appendix A References and Sources</i>	8.65
A.1	Conference sources cited for this topic	8.65
	References to OTiS Case Studies.....	8.65
	References to OTiS Discussions.....	8.67
A.2	External references	8.68
A.3	Author details	8.69



8 Staff Development

Carol Higgison

1 Introduction

Online learning is growing rapidly. It offers new ways of learning (Chapter 1), new ways of working together (Chapters 3 and 6), new methods of assessment (Chapter 4) and makes new demands of online tutors (Chapter 2). Online learning demands that a wide range of academic and support staff develop new professional skills, form new collaborations and undertake new roles. Staff development and ongoing support are essential to develop the range of new skills required for the effective delivery of online learning.

“Staff development is the key to good practice.” (Banks–D, 2000e)

A single approach to staff development is unlikely to meet the needs of such a diverse group. Staff will need to be able to adopt a ‘pick and mix’ approach to their professional development, depending on their particular needs (Levy, 1997). This chapter aims to present a framework for staff development and a range of rich resources (including the OTiS e–book and case studies) that can be used to support appropriate and sustainable approaches to staff development for online tutors. It suggests some core components of successful staff development programmes and provides some exemplar models of staff development. However, this chapter can only provide a starting point:

“It is, of course, qualitatively different being within an [online] environment to reading about it in a text such as this. Similarly, it is different to be within such a system in a teaching or learning context. In offering these anecdotes the reader unfamiliar with [online] systems must of course make whatever sense they can from the text. Much of what is said ... will only take on real meaning once the readers are in their own working context. Perhaps the best that such anecdotes or stories can do is to raise the reader's awareness of some of the things to think about and some of the possibilities in different situations within [online] systems. This is also more of a personal view of different experiences ... and I anticipate that the reader will change, develop or find more suitable methods of their own.” (adapted from Bowskill)

References given without dates are references to OTiS e-workshop case study contributions. References designated by the letter ‘D’ and with dates are references to e-workshop discussion group contributions. Details for both of these are given in Appendix A.

2 Institutional Support for Staff Development

The success of online learning is of strategic importance to many institutions. Chapter 7: *Institutional Support* (Templeton, 2001) discusses the structural and operational issues which must be addressed by organisations struggling to adapt to the new demands and support requirements of online learning. However, the role and contribution of staff development in enabling a successful transition is often overlooked.

Online learning draws on a wide range of academic and support staff, requiring them to work closely together in tightly knit, interdependent teams. Each group of staff brings their own skills and expertise to the team. At the same time, their roles are changing and evolving with new roles emerging and boundaries being redefined (Chapter 2: *The Tutor's Role* (Cornelius and Higgison, 2001)). Few individuals are likely to have, or be capable of developing, the full and complex combination of skills required. Therefore collaboration, co-operation and team working are important elements in any development. In particular, changes in traditional and new roles, team working and managing innovation must be addressed at an institutional level.

Each of these changes requires a different type of development and support and staff need 'time' to develop their skills. Traditional forms of staff development may not be able to keep pace with the rate of change (Salter) and suitable, alternative forms of staff development are currently not available in many institutions. This can be due to lack of time, resource constraints or lack of strategic planning to meet the continuing professional development needs of staff supporting online learning.

This section addresses some of the areas which institutions must address in order to provide effective staff development for online tutors. These include appropriate staff development, removing barriers, motivating staff and undertaking evaluation to provide evidence as to the benefits of online learning and the impact of staff development.

2.1 Institutional context

Each institution will have its own perspective on the role and importance of online learning within its own context. It will have to develop and adapt its staff development provision to meet its particular needs.

In the majority of OTiS case studies, the focus of staff development provision is on the immediate role of the tutor in supporting online learning. However, as Morrison points out, many tutors are also tackling new content, new ways of supporting learning, a new technical environment and, possibly, a new institutional context:

“Many ... tutors, including myself, were new to the ... University and had a steep learning curve to become familiar with traditional university procedures, [course] innovations, FirstClass [learning environment] and the course material.” (Morrison)

Staff development therefore, needs to be set in context and tailored to meet the needs of specific tutors with a particular role on a particular course within the institution. Factors that need to be considered include the intitutional objectives, selecting an appropriate and scalable model for staff development, determining whether all staff will be expected to support online learning and identifying their needs.

2.1.1 Meeting institutional objectives

“The staff development must be **fit for purpose** and be clearly linked to specific institutional objectives.” (Juwah)

Blom (D, 2000), for example, describes the needs of a traditional distance education institution that is moving to online learning. In order to support this objective, the institution has identified that staff must develop new skills in online communication, creating an online community and implementing a constructivist approach to learning (Blom-D, 2000):

“I come from a traditional distance education institution (an old correspondence school), and for us the traditional tutoring model is the one-to-one interaction between tutor and student via snail mail/postal services. We are used to thinking in terms of distance, so a question we need to consider is what characteristics of the traditional ‘correspondence model’ can be used in an online environment. In our staff development programme we try to listen to past practices and experiences, and rely on our ability to create meaningful dialogues between tutors and learners. What is new and challenging for our tutors is building a community, and understanding how a constructivist approach can facilitate learning.

“I believe we have a challenge in making our tutors accept constructivist learning theories as a good and workable basis for their tutoring. If, and when they do so, they will find creative ways and solutions.” (Blom-D 2000)

The tutor-role itself may be new within the institution and its remit undefined or unclear, as for example described by McKenzie-b.

“Because of the unusual situation of having both subject and process, tutors, for many, the role of the learning support tutor was not clear from the outset. This created uncertainty that took time and effort to resolve. Establishing the credibility and legitimacy of the learning support tutor, both in the minds of the course members, and with the College tutors became a real critical success factor in the whole process.” (Mackenzie-b)

In these cases, the staff development need goes beyond the immediate delivery of online learning to include issues of institutional culture and practice, and processes and procedures. In others cases the institution may decide to use staff development, or induction, to “introduce and orientate new tutors to the values that drive the organisation’s tutorial practice” (Ehmann).

Staff development can play a role in:

- developing the skills staff need to support institutional objectives (new or changing),
- defining new and evolving roles and responsibilities,
- inducting staff into the institution’s culture and values.

2.1.2 Models of staff development

Spratt (D 2000), drawing on her experience of facilitating a university wide academic staff development project called “*The Online Teaching and Learning Project*” (Bottomley *et al*, 1999), suggests that there is no one ‘right model’ of staff development.

“The University Executive tried to balance activity at faculty level by offering a centrally funded project. We were trying to support bottom-up initiatives with top-down support. [The institution] has what some would envy by way of IT infrastructure and its still not enough! Academics have to

be convinced that technologies will be useful for themselves and their students. There are enormous constraints as you have all addressed. What must be acknowledged is that committed resourcing to staff development is imperative. Faculties can't do this alone. Central support has to be available. The creative use of IT in pedagogy won't happen if people can't reflect on their own teaching and be encouraged to think imaginatively and creatively with the help of skilled and qualified support staff, librarians, educational technologists, academics with pedagogical expertise. One of the best ways to this of course is in the context of teams working collaboratively on real projects to solve real educational problems." (Spratt-D, 2000)

Each institution needs to define and resource its own 'right model' of staff development. This must include the appropriate mix of central support and departmental or faculty/school level support, which meets its particular needs and circumstances. This will usually involve some form of needs analysis (Section 2.1.4) and must be scalable (Section 2.1.3). A framework for assessing staff needs and creating staff development programmes is suggested in Section 4.1.

2.1.3 Scalability

Training for online tutors must be responsive and flexible to their individual needs but must also be scalable and capable of addressing the training requirements of large groups of staff (Ehmann).

"...tutor training should be structured such that it is scaleable and can accommodate a large tutor pool, as well as 'one-off', emergency training sessions for new tutors who start half way through a semester. For example, within the tutor group at Smarthinking there is a hierarchy of lead tutors who are qualified to help train and mentor new tutors." (Ehmann)

Individual activity must be supported by complementary institutional activity:

"Scalability is not possible unless there are institutional developments happening in tandem with activities of individuals.

"For example, you need the right technology platform infrastructure and learning environment to be able to scale up.

"So organisations as well as individuals need to be involved." (Banks- D, 2000a)

As Banks (*ibid*) argues, institutional developments must complement and support individual activity, and vice versa. As institutions become more involved in online learning and the demand for online tutors increases, the quality of the learning experience and the reputation of the institution is at stake if the staff do not have the appropriate skills. It is particularly important that the necessary infrastructures are in place to support both staff development and the delivery of online learning.

Online staff development opportunities and resources, which address the issues of flexibility and scalability, are described in Section 4.

2.1.4 Identifying the development needs

Online learning often develops out of small scale, ad hoc experiments and trials. Similarly, staff development for these innovators often starts out 'on the job', learning through experience by trial and error. As the demand for online learning increases, a strategic approach must be taken to meet the development needs of a wider range of staff. It also offers an opportunity to step back, identify the key changes that are taking place and specify the new

staff roles and skills that are needed. This allows us to determine the staff development support necessary to underpin these changes.

Blom (D 2000), as discussed in Section 2.1.1, identified a change in pedagogical approach and new facilitation and technical skills required by staff. Similarly, Salter describes a staff development approach designed to move online tutors from a didactic approach to teaching towards a constructivist approach.

Bowskill and McKenzie-a describe staff development initiatives that introduce the education potential of a specific learning technology new to their staff, respectively real-time chat and videoconferencing. The training addressed the pedagogical and technical aspects of the using the technology to support learning and teaching and McKenzie-a discusses ways of overcoming the barriers to change inherent in the institutional culture.

Glass describes a nationally funded initiative designed to meet the needs of a particular group of staff in Australian education. The programme was accredited and delivered by an external agency. It was designed to develop experienced and knowledgeable staff who will act as champions and staff developers within their own institutions. The aim of the programme was long term: to provide a sustainable, cascade model of staff development by developing the developers and using them to deliver the training in their local institutions. Although primarily delivered online, the programme used face-to-face sessions for topics perceived as difficult to deliver online such as change management, mentoring and focus group techniques.

Salmon describes a programme designed to meet the development needs of a large number of part time tutors who are professionals in their own field but who have no experience of tutoring online. They are required to tutor at a distance but do not have time to attend a face-to-face training sessions or on their own development. The staff development programme is short (10 hours), delivered entirely online, is self-paced, highly structured and clearly identifies the skills (technical, information and social) being developed. By contrast, Mottley describes a much smaller initiative within a single department. In this case, an enthusiast identified a local training need in a situation where most of the target audience were inexperienced and not particularly motivated. The programme was structured around a series of short face-to-face workshops which addressed the essentials of online tutoring at very basic level. They focused on practical experience and skills development to motivate staff and provide a baseline from which they could progress at their own pace. The sessions provided the participants with the time and space for interaction, and regular contact with their peers and the tutor.

These are just a few examples drawn from the OTiS case studies which focus on staff development. As these demonstrate, staff development needs are wide and varied and the staff development provision must accommodate this diversity.

Some key questions that need to be addressed in determining the staff development needs include:

- Determining if we should draw a line between online course delivery (ie teaching online) and development (creating web sites etc)? Some staff may want to get involved in, for example, web site construction while others will want to use accessible online teaching tools such as discussion boards and quiz managers.
- Determining and defining the new roles and collaborations which are emerging.
- Determining what technical and pedagogic skills tutors will need. What abilities are more important – technical or pedagogic? We suggest teaching skills are more important.
- Considering what delivery mechanisms will best meet these needs, be accessible to the target audience and have flexible timelines for participants who need it.

- Considering the learning styles of the potential tutors and others involved in supporting online learning.
- Improving managers' understanding of staff needs and support requirements.
- Securing the necessary resources and funding to include the appropriate staff from all supporting departments.
- Identifying institutional barriers to staff engaging in online tutoring.
- Promoting institutional processes and procedures which reward, encourage and motivate staff to engage with online learning.
- Deciding if all staff expected to be able to become effective online tutors and support online learning.

2.1.5 Selection and development

An important question that each institution must consider is whether all staff are expected to become proficient online tutors and support online learning. Glass (D, 2000a) suggests that for staff to be successful as an online tutor they must be flexible, have the ability to adapt to change, and have the ability to emit warmth and a caring attitude via the written word. McKenzie-b suggests that one of the “keys to promoting participation seemed to be the personality of the learning support tutor” – an inherent characteristic rather than one which can be developed.

Glass (D, 2000a) and Ehmann, for example, select staff and only offer training to those with an ‘aptitude’ for online tutoring:

“For the professional development program I am involved in, we selected participants on a number of skills, such as computing/Internet skills, teaching qualifications etc – these skills are rather easy to measure.

“However, we also asked applicants to give the selection ‘checklist’ to a colleague and a senior person to complete. There was then some sort of triangulation for selection. Included in the checklist were flexibility and adaptability.” (Glass–D, 2000a)

“Although successful applicants had extensive teaching or tutoring backgrounds, all went through simulated tutorial exercises. The intention was to identify the ways in which individuals intuitively responded to tutoring in an online context.

“...all of the tutors...have passed simulated tutorial exercises during the selection process.” (Ehmann)

Steeple (D, 2000b) recommends the use of competency frameworks (see Chapter 2: *The Tutor's Role*) to select appropriate candidates, but acknowledges that their use presents some difficulties, especially when used out of context:

“One of the real purposes in developing things like competency frameworks is to help in a selection process. This can particularly be helpful when competences are identified by ‘the ability to’ type statements, against which you can attempt to assess an individual’s ability in that area.

“Of course this becomes highly complex and difficult when [for example] we're looking for qualities that out of context can be very difficult to identify or assess.

“And we do need to move away from terms like ‘the ability to manage the online environment effectively’ to some much finer grained and more precise account of what it means to be effective in this way.” (Steeple-D, 2000b)

Janes (D, 2000b) on the other hand argues that good face-to-face teachers are likely to be good online tutors and that the key skills are transferable, for example being able to bring the content alive, the relationships with the group and caring about the process.

A list of tutor roles tasks, activities and competencies can be found in Chapter 2: *The Tutor's Role* (Cornelius and Higgison, 2001). The decision as to whether or not to select staff with the appropriate skills will depend on the institutional context. However, training unwilling or unmotivated staff will be a very unproductive exercise.

2.2 Removing barriers

Institutions need to provide a supportive environment and minimise the barriers their staff face in becoming effective online tutors. Street lists some of the major barriers encountered by staff in her institution and documents some ad hoc solutions by which a motivated team overcame these barriers:

- i. **“Development time required and extent of learning curve for staff.** This was partly over come by the enthusiasm and willingness of those involved. The module leader had to invest a great deal of time in preparation of tutors for this experience. Staff needed to recognise the pedagogical value of the conferencing before they were willing to invest in the learning process.
- ii. **“Lack of readily available and usable pedagogic advice.** This was overcome by the collaboration of the staff team, willingness to ‘try it out’, and much initial investment by the module leader.
- iii. **“Ethical concerns about effect on students’ learning experience.** Careful planning and monitoring of first year of operation to ensure students were not adversely affected by the delivery method.
- iv. **“The potential for students not to engage in learning activities.** Non participation can adversely affect the ability of the environment to enable learning ... Strategies for rewarding participation and motivating students were developed ...
- v. **“Potential Workload.** ... staff initially became overwhelmed with the potential burden of contributions and assessment. ... necessary to review the staff role to make conferencing achievable. Decisions about moderating student input, level of response to student contributions and access times to the conference were made.
- vi. **“Workload Metrics.** Traditional workload allocation rates required review as a result of both the initial development time required for this delivery method, and the daily process involved in running a conference.” (Street)

The ad hoc solutions described by Street (*ibid*) are not sustainable in the long term and will rapidly reduce the goodwill and willingness of staff to engage in online tutoring. These barriers, which encompass institutional culture, processes and procedures are often beyond the remit of staff development to resolve. However, they must be addressed if the institution is to successfully support online learning. Otherwise, as Hird suggests, the status quo will prevail:

“The most significant barrier that I encounter in my online teaching is the need to develop a new understanding of my role and responsibilities as teacher in an online environment. As with any organizational change, there is a strong inclination on the part of both teacher and students to fall back into old roles and routines when the uncertainty of the new learning environment and interactions become uncomfortable.” (Hird)

Chapter 7: *Institutional Support* (Templeton, 2001) considers the issues of institutional culture, strategy, processes and procedures in greater depth. Two particular issues, which directly affect staff’s ability to develop these new skills, are discussed below: time and training.

2.2.1 Lack of time

“Time is the major barrier for staff to attend staff development activities and then to follow-up (eg by developing online teaching resources).” (Salter)

Time is perceived as a significant barrier to staff development in three main ways:

- the time needed to attend courses,

“...one of my responsibilities is to develop workable models of technology integration for other faculty members in the School of Education. Any model I develop must be easily adaptable for instructors with limited time to devote to learning ...” (Hird)
- the time needed to develop and consolidate skills,

There has to be a real reason for doing it, besides just practising the act – a value must be placed on this interaction if [they]... are to find the time to interact regularly and effectively.” (Mottley)
- the time needed to implement new methods and ways of teaching, ie online tutoring.

“The main evidence of success is the creation of online learning materials courses by participants as a result of the workshops. (Mottley)

The OTiS case studies document many different approaches to staff development each with different time implications. Mottley for example, provided a series of twelve weekly, one-hour lunchtime sessions, which were focused and were supported by follow-up activities provided online. White and Moussou provide an intensive, three-week online course which has the aim of maintaining momentum and motivation:

- “It is easier to hold learner attention for a shorter period of time in the online environment when there are no particular motivations other than learning ...
- “An intensive experience has the capacity to grab us, to transform us. It seems to tick open some doors that remain shut when things are slower and spread out ...
- “We, as the tutors, like to give focused attention.” (White and Moussou)

This contrasts with other approaches, for example in Noakes, where participation was voluntary, the course was delivered over fourteen weeks (a semester) and effort was targeted at the level of two hours per week which contrasts with the two hours per day expected by White and Moussou. Salmon and Ehmann both provide online courses which are self paced and take ten and eight hours respectively. Glass describes an accredited course which requires

twelve hours per week for twenty-three weeks and Pickering and Duggleby offer a similar accredited framework which requires six hours per week over a twenty week period.

The range of possibilities is infinite. The key criterion should be that the provision meets the needs of users and the institution in the most appropriate ways.

2.2.2 Lack of appropriate training

Staff development provision is essential and it must be appropriate, flexible and scalable (Section 2.1). Failure to address these needs can have major consequences. For example, lack of training can have significant time implications for online tutors, as noted by Janes:

“The lack of training did make for an uneven tutoring balance among the core tutors, in the beginning. A cost-benefit analysis of the first offering of the first course in the certificate revealed tutor ‘time-on-task’ to range from 180-400 hours in the same 13 week period.” (Janes)

A focus on the technical issues at the expense of pedagogy (Section 3) can also result in a failure to adapt to new ways of learning and teaching and a failure to exploit the benefits of the new learning technologies as described by Salter:

“A recent study into online teaching found that the majority of topics on offer to staff at Australian universities relate to the mechanics, rather than the pedagogy, of online teaching (Ellis, O’Reilly and Debrecey, 1998).

“...analysis of the teaching web sites highlights a disturbing trend. Even after staff development workshops, many academics are simply using the environment to post electronic lecture notes. The danger is that educationally ineffective or inadequate patterns of online teaching may become habits embedded in online teaching practice...

“While teachers clearly cannot make effective use of the technology until they gain technical competence, it may be a mistake to leave the educational issues to a second stage. This can falsely signal that they are of lower priority. More importantly, teachers will often use the technology immediately after they have attained a degree of competence. If this is done without adequate consideration of the educational issues, it may lead to the perpetuation of didactic teaching styles in the online environment. Pedagogical issues need to be ‘brought up-front as a professional development priority from the beginning and, in the initial stages, developed in teachers concurrently with the development of technical competence’ (Fowler and Dickie, 1997).” (Salter)

Lack of training can also result in a failure of staff to engage with the learners and provide a quality learning experience, as noted by Daele:

“After the training we observed that the tutors who didn’t follow the training were less involved with the students.” (Daele)

Lack of appropriate training can result in:

- tutors who are ineffective and inefficient,
- tutors who transfer inappropriate teaching practices to the online environment,
- tutors who do not engage with the students and support their learning.

Appropriate staff development can make staff more effective and efficient and ensure that tutors provide a consistent, high quality learning experience for the learners. The core components of an effective staff development programme are discussed in Section 4.

2.3 Motivating staff

Institutional culture and policy can have a significant impact on motivating staff to become involved in online tutoring. Motivating staff to undertake the development of new skills is extremely difficult. It is often at the bottom of their priority lists, as noted by McKenzie-b:

“Subject tutor expertise in the use of online tutoring is notoriously difficult to disseminate effectively. Lunchtime seminars and poster sessions help, but are often poorly attended. Training sessions are often seen as unnecessary.”
(McKenzie-b)

Banks (D 2000a) suggests a number of factors that will determine staff’s willingness to support online learning:

“I think there are a number of incentives for tutors to get involved in online learning:

- (a) “that it is exciting and innovative in its own right – can possibly lead to new forms of learning and reaching new kinds of learners,
- (b) “that there are project and funding opportunities (at the very least giving time release to develop innovation),
- (c) “that it leads to new professional opportunities (personally speaking it has given me new employment opportunities!),
- (d) “that it creates research opportunities – evaluation and action research should be part and parcel of curriculum development.” (Banks–D, 2000a)

Some staff may be intrinsically motivated to develop their online tutoring skills, as for example noted by Steeples (D 2000a):

“...another incentive for getting involved in online tutoring is that it causes us to examine our tutoring methods, beliefs and knowledge.” (Steeples–D, 2000a)

However in many instances the motivation is extrinsic and is influenced by the amount of institutional support for online learning and tutoring.

Recognition and rewards

The institutional context can have a significant impact on the willingness of staff to develop the necessary skills and engage online learning. It is important that they are valued and acknowledged in a positive way, for example by contributing towards promotion or other benefits. Previous bad experiences can be a significant barrier to innovations (Noakes–D 2000). However, token acknowledgements (Mottley) and rewards (Salmon) are often sufficient:

“The incremental approach is the way we are working right now because of an initially resistant context due a forced top-down implementation of a previous software innovation. I’m sure different approaches will be needed with different contexts.” (Noakes–D, 2000)

“An official certificate of attendance listing all the workshops each participant attended would be desirable as a token recognition and proof of their efforts to upgrade their skills. This reward may be conditional on participants completing a few basic coursework tasks associated with each workshop and carried out in Web-CT. This would hopefully give a further boost to post-workshop online activity.” (Mottley)

“A small fee and a sum for telephone expenses, and a certificate of completion would be provided that the trainees could claim on completion of their exit questionnaires.” (Salmon)

Institutional support can include removing barriers and providing an environment where learning and teaching activities, and online tutoring in particular, are acknowledged and rewarded as valuable activities.

2.4 The role of evaluation

Evaluation of online learning is addressed in some depth in Chapter 5: *Evaluation* (Harvey *et al*, 2001). However there are difficulties in evaluating the effectiveness of tutor training for online environments because there is not a direct relationship between the quality of training and the quality of outcome (Gunn-D, 2000b). Banks (D 2000b) suggests that evaluation of online learning and the effectiveness of staff development should still be a strategic priority:

- to provide evidence that online learning is effective,
- to research and contribute to our understanding of concepts and terminology,
- to synthesise evidence of good practice in staff development.

Banks (D 2000c) gives six reasons for evaluating staff development for online tutoring:

1. “Academics need the research evidence that online learning is effective.
2. “In order to get this evidence, they need to experience online learning for themselves and get to understand how their professional practice must change in order to engage in online learning.
3. “The practice of online learning is still evolving – there are many variants of practice. Online learning is an umbrella term for many different kinds of practice, some of which we don’t know about yet.
4. “So we need evaluation of staff development at an individual, organisational and multi-organisational level.
5. “Participants in staff development in online learning need to conduct local evaluation as part of the action research that is needed.
6. “At a very basic level, we still have confusion about terminology – eg different meaning of ‘online learning’, ‘networked learning’ and ‘e-learning’. There is often confusion between methods of staff development where online learning is used as the platform for delivery and where online learning is the subject of staff development.” (Banks-D, 2000c)

Evaluation of staff development to enable staff to support online learning is essential to provide evidence and credibility for new ways of working. It also presents staff with a strong case for the necessity to examine their views and approaches to teaching and the need to develop their professional skills.

2.5 Recommendations

Online learning offers new opportunities and makes new demands on individuals who need to be supported in developing the necessary skills.

The development needs

In order to support the development of these skills in online tutors, staff development provision needs to:

- raise the awareness of staff in the appropriate use of technology to support online learning,
- develop an understanding of the new pedagogic environments (OTiS e-Book chapters 1: *Learning Styles* (Cornelius, 2001), 5: *Evaluation* (Harvey *et al*, 2001) and 6: *Cultural and Ethical Issues* (Labour *et al*, 2000)),
- develop an understand of the application of technology in these new learning environments (OTiS e-Book chapters 2: *The Tutor's Role* (Cornelius and Higgison, 2000) 3: *Building Online Communities*(Zimmer *et al*, 2000) and 4: *New Assessment Methods* (McAlpine and Higgison, 2001))
- develop an ability to work in multi-disciplinary teams,
- establish these skills at the level of awareness, understanding and application.

The development process

We need to support the development of the technical, teaching and contextual knowledge and skills needed for online delivery by:

- identifying the main roles and activities involved in supporting online activities (eg as in Chapter 2: *The Tutor's Role*)
- identifying and defining job descriptions for all staff involved,
- identifying the skills and abilities associated with each role,
- drawing up a training and development plan, including objectives, timetables and resources,
- setting up a monitoring and evaluation process to monitor the effectiveness of the plan (Chapter 5: *Evaluation*).
- ensuring the institutional culture, procedures and process support and value the innovation (Chapter 3: *Institutional Issues*).

3 Pedagogy vs Technology

Staff development is essential to ensure that staff have the necessary skills and expertise to become effective online tutors.

“... it needs pedagogical know how – eg collaborative and co-operative learning, creating learning communities; awareness of instructional design and making design decisions; how to work in multi-disciplinary teams (eg working with instructional designers, Web authors etc); awareness of different technologies and solutions (eg use of multimedia); how to support learners online – some guidelines on this have already been given, eg giving frequent and regular feedback, engaging socially as well as academically.

“In other words, how to exploit learning technology to best advantage.”
(Banks-D, 2000c)

The range of skills an online tutor needs to achieve this fall into four broad categories (eg Daele, Glass and Salmon):

1. IT expertise.
2. Information handling expertise.
3. Educational and pedagogical skills.
4. Management skills including change agency, team-building and the ability to work in multi-disciplinary teams.

This section considers the development of each of the four skill areas identified above and examines the role of the staff developer as an agent of change.

3.1 Staff developers as agents of change

If staff developers are to actively promote change in teaching practices and pedagogy then they need to have experience and be proficient in these areas:

“It would appear crucial that staff employed in this [staff development] centre have instructional design and curriculum development knowledge, effective people skills and an awareness of professional development strategies, and of information and communication technologies.” (Newby-Fraser and Clayton)

Staff developers need to engage staff in challenging their beliefs about learning and teaching:

“...staff development in online learning has to work at this fundamental [level] where you are re-examining your educational values and philosophy – and that staff developers also have to project theirs. Otherwise adapting to online learning remains mechanistic.” (Banks-D, 2000d)

The staff development must offer opportunities for self-reflection. It is essential to develop staff as reflective practitioners (Schon, 1983) to enable them to challenge their own beliefs, attitudes and practices, and to personalise their experiences and set them in context. Nurmela describes how appropriate staff development can support this process:

“During the first week participants ... described their expectations... This was a start for serious reflection that continued during the whole course. Participants were also asked to write their thoughts and reflections that arose during the course (a personal reflective log)... Based on these notes and reflections participants wrote their self-evaluation at the end of the course. In the self-evaluation participants compared their experiences about learning

and tutoring online to those expectations they had had at the beginning of the course. They also had to think how their attitude towards learning in web based learning environments had changed and how they saw their role and tasks as online tutors now.

“It seems that the idea of creating an action-theory of online tutoring based on participants’ own experiences during the course gives a good background for online tutoring. It is difficult to get a realistic picture about tutor’s role and tasks without self-studying and teaching online. Participants in online tutor training managed to create their own action-theory for their own use.” (Nurmela)

This contrasts with a less successful experience described by Salter where this reflective element was initially omitted. This resulted in existing teaching practices being transferred unchallenged into the online environment where they are often inappropriate.

“An attempt to ‘mainstream’ online teaching as a supplement to face-to-face teaching at the University ...has, on the surface been quite successful...the number of staff using the Web in teaching has gone from 25 to well over 200... However, analysis of the teaching web sites highlights a disturbing trend. Even after staff development workshops, many academics are simply using the environment to post electronic lecture notes. The danger is that educationally ineffective or inadequate patterns of online teaching may become habits embedded in online teaching practice. This has led to the development of an online teaching module, based on constructivist principles, which attempts to model good pedagogical practice in online teaching.” (Salter).

Staff developers need to act as agents of change, encouraging staff to challenge their existing beliefs about learning and teaching and developing their abilities as reflective practitioners. To achieve this they need to have appropriate expertise and credibility.

3.2 Technical skills

The consensus of OTiS e-workshop participants is that while online tutors do not need to be technical experts they do need a reasonable level of keyboard skills. Two distinct levels of technical expertise can be identified from the OTiS case studies:

- basic IT (information technology) skills,
- the ability to navigate and use the online environment.

Basic IT skills

In some cases studies tutors are expected to be technically proficient in IT skills (Ewing), although this is not always a valid assumption (Wishart).

“Underlying this study is the expectation that student teachers will be competent and confident in using ICT [information and communication technologies] in their teaching in the classroom.” (Ewing)

“Another barrier that we didn’t expect was the high proportion of participants with a complete lack of keyboarding skills – up to a third of some groups. ... they found operating Shift & Caps Lock [keys] difficult which led to great problems with typing in user names and passwords and much frustration ...” (Wishart)

However, basic IT skills were seen as becoming less of a problem over time and in the future:

“As time goes on, user familiarity and literacy with the IT learning environments becomes less of an obstacle to initial participation.”
(McKenzie-b)

Using the online learning environment

The second level of technical proficiency expected of online tutors is the ability to use and navigate around the online systems. In some cases staff with IT skills are expected to be able to transfer these to the online learning environment by themselves, ie be able to use and understand its basic features. However increasingly this is viewed as unrealistic and inefficient (Creanor):

“Tutors do however have to become familiar with managing the First Class interface, ie creating new conferences, moving messages, deleting messages, and managing threaded discussions. Up till now no formal training has been given, but in future it is planned to provide more structured support for tutors through a short induction session followed by a mentoring system.” (Creanor)

Developing the technical skills

There are three basic approaches to the development of these types of skills in online tutors:

- Specifying a minimum pre-requisite skill-set making the participant responsible for the development of these skills, as in Littlejohn:

“Basic IT literacy skills and both web and email access were pre-requisites of the course, however it was assumed that participants could not create a web page.” (Littlejohn)

- Providing additional mechanisms and routes whereby participants can develop these skills if necessary, as described by Nurmela:

“Participants had two weeks to become acquainted with WebCT before the beginning of their studies. They got help from the guide called *Learning online With WebCT* and from the practice web based learning environment (<http://salima.tkk.utu.fi/public/NetSailor/>). At the beginning of the course participants could also receive technical training about WebCT. Only the orientation evening was organised as a face-to-face session simultaneously with an audio-conference for remote participants. Technical help was given by phone. After orientation all interaction took place online via WebCT.”
(Nurmela)

- Integrating the training in using and navigating the online environment with the pedagogic training, as described in McKenzie-b:

“Initial training in the use of the software was provided through a face-to-face workshop for the course members, and tutors had training in both facilitation skills and the use of the technology.” (McKenzie-b)

Although in this case, it was perceived as an unsatisfactory experience:

“The technology training was unsatisfactory, because although it taught people how to use the software, participants did not absorb enough about the effects of a different mode of interpersonal interaction.” (McKenzie-b)

The majority of OTiS case studies describe an integrated approach where the technical skills needed to use and navigate the online learning environment are developed along with the pedagogic and information handling skills. Salmon for example has developed a 5 step model which integrates the development of the core technical, information and social skills at each step. Softer skills such as effective communication and teamworking skills (Section 3.5) are often addressed by face-to-face methods, separately from the online tutoring aspects.

3.3 Information handling skills

Many online tutors have to deal with a vast range of new information and experiences beyond their immediate role of online tutor. As described by Macdonald the tutor may be new to the institution and unfamiliar with its culture and procedures as well as to the course content and new ways of teaching. Her experience is not an isolated one:

“I had no training in monitoring chat rooms or managing language courses at a distance ... I had neither previous knowledge nor experience in enrolment procedures and university administration structure.” (Radic)

In Chapter 2: *The Tutor's Role* (Cornelius and Higgison, 2001) we discussed the multiple and diverse roles tutors are expected undertake, all of which require the ability to handle, process and apply vast amounts of information. The staff development provision needs to support staff in the development of the skills needed to handle and apply this information.

Provision may need to include, for example:

- induction sessions about the institution, its strategies, policies and procedures,
- clear definition of the roles and responsibilities of tutors with pointers to supporting documentation, information and, if necessary, additional training,
- clear structuring of relevant information in an easily accessible format, for example quality assurance requirements,
- setting up and supporting multi-disciplinary teams which incorporate information and technical specialists,
- developing team working and communication skills.

Much of this type of development is context dependent and can be supported by mentoring and peer support networks, both of which are discussed in Section 4 – Core Elements of Staff Development.

3.4 Pedagogical understanding

We have argued in Chapter 2: *The tutor's role* (Cornelius and Higgison, 2001) that online teaching is significantly different from face-to-face teaching in terms of the tutor roles and skills. “Tutors need to be able to understand what it means to teach in an online environment” and the “implications about teaching and learning online” (Banks–D, 2000e). In particular, “designers and facilitators of online courses need to be aware of, and have respect for, the diverse needs of their learners.” (Whittington and Dewar)

Therefore, we would argue that pedagogy is the most important aspect of staff development for online tutors. It is essential that tutors understand the principles that underpin online learning.

“What is important is to educate professional teachers, web designers and other multimedia developers in the pedagogical aspects and appropriate educational methods.” (Doufexopoulou)

Salter, amongst others, highlights the implications of focusing on the development of technical skills at the expense of pedagogy. If pedagogic issues are not addressed up front, inappropriate practices are transferred from face-to-face practice to the online environment and we lose the benefits offered by the new medium (see Chapter 1: *Learning Styles* (Cornelius, 2001)). As Street notes this expertise is often missing:

“Pedagogical support was at the time, very sketchy. Detailed examples of task setting, and opinions on the best way to organise conference activities would have been useful. The collaboration of the tutors was invaluable.”
(Street)

Online tutors need to have a general understanding of how people learn, and in particular, how they learn in online environments. Staff require a basic toolkit of teaching strategies that work in the online environment (Mohamand):

“Other instructors/staff/trainers should initially be clear about the cognitive map of their courses, and they should be certain about the feasibility of adapting specific tasks online to support theoretical understanding of specific concepts.” (Mohamad)

For example, the tutor needs to consider the impact a learner’s preferred learning style might have on their willingness to participate in online social interactions, as opposed to task based activities, and how this might affect the dynamics of the group. This will help the tutor structure the online environment and activities as, for example, described by Whittington and Dewar.

“... informal chat areas in online courses are vital to the overall positive learning environment for feeling types. Making participation in these informal areas compulsory, however, might disadvantage the thinking types.”
(Whittington and Dewar)

However approaching these issues with staff can be a sensitive issue as Salter reports:

“...trying to address the pedagogical issues up-front as a professional development priority can raise anxiety levels and tutors became defensive, because they feel that they are already experts in pedagogy, and andragogy.”
(Salter)

Challenging staff’s self-perceived expertise in teaching can produce an environment which is not supportive of open discussion and exploration of online learning. It is important therefore, to build on the staff’s existing knowledge and experience and reassure them that many of the skills they already possess, eg the ability to frame questions and to facilitate dialogue, are transferable to the online environment:

“There is a need to reassure teaching staff that the skills they already possess in small group teaching and personal support of learners are the foundation for their successful participation. This can be achieved by dissemination of teaching skills appropriate to distance learning to other staff, using the mechanisms for disseminating good practice within their institution. It is essential to be realistic about the time involved and the intensive nature of the communication between teacher and students in supported distance learning.”
(Kennedy and Duffy)

The tutor must have a clear understanding of their role in supporting the student’s learning. This is a particular issue, for example where the tutor roles are split into subject expert and learning support, as for example in McKenzie-b, or the tutor’s role is unclear (Daele):

“For the learning support tutors, being detached from the subject content was a major source of discomfort. It required considerable training, in face-to-face workshops, and through an online training database, to help them understand the contribution that they could make to the quality, depth and breadth of learning for the course members they were responsible for. Building strong relationships on line seemed to be a skill that many found quite difficult. Much was invested in communication skills training, workshops to help them learn from one another. Constant re-enforcement and encouragement from a central lead tutor, responsible for the welfare of the learning support tutors, was critical to the working of their community of practice.” (McKenzie-b)

“The tutors’ training helped to define my roles and how to react in a particular situation.” (Daele)

Where the tutor role is separated from the subject discipline or involves students from different cultures, the tutor must be aware that learning approaches and styles may differ with different disciplines as well as across cultures. These issues are discussed in greater depth in Chapter 6: *Cultural and Ethical Issues* (Labour *et al*, 2000).

3.5 Collaborative and communication skills

A significant part of the role of the online tutor requires a clear understanding of group dynamics and good communication skills. Many of the OTiS case studies feature the development of online learning communities, collaborative work and group assessments. In-depth consideration of these issues is addressed in Chapter 3: *Building an Online Learning Community* (Zimmer *et al*, 2000) and Chapter 4: *New Assessment Methods* (McAlpine and Higgison, 2001).

Where appropriate the staff development provision should address communication and interpersonal skills as well as collaborative and team working skills:

“Developing an appropriate skill set amongst the learning support tutors is critical to the success of a programme that seeks the intimacy of collaborative team learning, in a virtual environment. Critical competencies include the ability to develop a supportive and empathetic online persona through the text based medium, strong communications skills, multi-cultural sensitivity, an enthusiasm for the technology, but a critical attitude to its impact on learners’ progress.” (McKenzie-b)

Although the majority of OTiS e-workshop participants and case study authors recommend that all online tutors experience online learning from the learner’s perspective (for example White and Moussou), not all participants agreed that these less tangible, ‘soft’ interpersonal skills could be developed via online mechanisms (Glass).

“...an experiential process where participants can not only think about how they would facilitate online, but "feel" it as well.” (White and Moussou)

“The course also addressed issues of change management, mentoring and focus group techniques in the face-to-face sessions.” (Glass)

Suggested approaches and delivery mechanisms for staff development for online tutors are addressed in Section 4 – Core Elements of Staff Development.

3.6 Recommendations

Staff development needs to actively support and encourage staff to develop the skills they need to become effective online tutors. These skills include pedagogical understanding, technical skills, information handling skills and collaborative and communication skills. Staff development needs to:

- provide opportunities for staff to develop their technical skills,
- challenge staff beliefs about learning and teaching,
- build on their existing pedagogic and educational experience,
- identify appropriate and effective strategies to support online learning,
- help them clarify and understand their role as an online tutor,
- use methods which develop their collaborative, communication and team working skills
- develop them as reflective practitioners who challenge their own beliefs about learning and teaching.

4 Core Components of Staff Development

“Up front preparation of course members and tutors is critical.”
(McKenzie-b)

As we have discussed in the preceding sections, online learning involves a wide range of academic and support staff, requiring them to work closely in teams where their roles are changing and evolving. A single approach to staff development (Section 2.1.2) is unlikely to meet the needs of such a diverse group of staff. Staff will need a range of provision from which they can select according to their needs and their preferred styles and modes of learning.

This section summarises features, identified by the OTiS e-workshop participants, which contribute to successful staff development programmes for online tutors. These include a framework for skills development based on an experiential learning model which is delivered in a range of formats and supported by an appropriate infrastructure and resources.

4.1 A framework for skills development

We have taken an in-depth look at the roles and skills required of an effective online tutor in other chapters of the OTiS online e-Book (Higgison, 2000–1). This section takes a step back and attempts to provide an overarching framework which can be used to plan and structure the acquisition and development of these skills.

Effective online tutors are often held to have ‘working knowledge’ or ‘craft knowledge’ (Steeple *et al*, 2000) which is mostly tacit and practical and acquired through experience. This ‘craft knowledge’ is seen as “integrating situated subject matter knowledge, pedagogical content knowledge, knowledge of learners and beliefs about effective learning methods” (*ibid*) and is developed over time through active experience in the role.

Berliner (1988, cited in Steeples *et al*, 2000) suggests a framework of five stages in the development of an online tutor’s knowledge from novice to expert. Figure 4.1 – The development of expertise, shows the progression of a tutor from novice, through the intermediate stages of advanced beginner, competent and proficient, to finally becoming an expert. Figure 4.1 defines the ‘craft knowledge’ which characterises each stage of development.

The development time needed to progress from novice to expert is long, Berliner (1988) suggests nine years, and staff development provision must address the needs of staff along the entire spectrum, including:

- staff new to teaching,
- staff new to the institution,
- staff not traditionally involved in supporting learners,
- experienced staff new to online tutoring,
- staff experienced in open and distance learning but not the use of learning technology,
- staff experienced in using learning technologies,
- staff experienced in online learning.

Staff may fit into more than one category, for example an experienced online tutor new to the institution or an information specialist new to supporting online learners.

Stage of Development	Years of experience	Craft knowledge
Novice	0	Seeks rules and recipes to guide action.
Advanced beginner	1–3	Seeks strategic and contextual knowledge. Begins to know when rules can be broken.
Competent	4+	Able to monitor own performance and make conscious choices about what to do.
Proficient	5–8	Increased use of intuition and tacit knowledge. ‘Read’s the learning situation easily, sees its events as connected and explicable
Expert	9+	Characterised by fluency and automaticity. Fully adapted to and in control of the situation.

Figure 4.1 – The development of expertise

Berliner (1988, cited in Steeples *et al*, 2000)

Core and Wiles (2001) provide one example of this progression viewed from an institutional perspective. They suggest a framework comprising four stages of “competence in developing skills in the application of communication and information technology skills (C&IT) in education”:

1. Acquiring basic skills and awareness of the use of C&IT.
2. Competence and confidence in teaching using C&IT.
3. Embedding the use of C&IT in course design and delivery.
4. Recognition and accreditation of practice using C&IT in learning and teaching.

Both frameworks can be used to identify the current level of competence of staff in the broad range of skills required by an online tutor (Cornelius and Higgison, 2001) and as a basis for planning their future development. Many of the OTiS case studies describe adaptations of these principles (See Section 5 for further details).

A core element of these frameworks is the concept of learning through experience. This approach is strongly supported by the OTiS e-workshop participants and is discussed in the next section.

4.2 Learning by experience

The majority of OTiS participants agreed that online experiential, collaborative learning, *as a student*, is the key to successful staff development. Experiential and collaborative learning delivered using the technologies the participants will be using as tutors and designed according to the principles being espoused is the preferred approach for staff development.

“The major issues in staff development and training seem to be that ... experience is the best teacher so participation as a student in an online course is the way to go.” (Gunn-D, 2000a)

The experiential nature is fundamental to the purpose of gaining practical understanding of the methods and issues in online teaching and support, and of developing the skills in using the online environment. The collaborative emphasis supports the exchange of ideas and knowledge sharing between colleagues in different roles and with different experiences. As Salter notes:

“In order to incorporate online skills into their own teaching academics are likely to benefit by actively experiencing them as a learner (Wills *et al*, 1997). Teachers who have positive experiences with technology and have adequate support are more likely to integrate technology into their own learning (Freeman, 1997).” (Salter)

If staff have a positive experience as an online learner they will be more enthusiastic and informed about the medium and its potential in learning and teaching.

Making connections

It is very unlikely that staff will have prior experience of online learning and this approach provides an opportunity to reflect on their experiences (Banks-D, 2000c) and relate theory to practice (Pickering and Duggleby).

“The most important method I think is that tutors should be able to experience online learning for themselves and then be in a position to review and reflect on what their own professional practice would look like if they change their course into an online learning mode.” (Banks-D, 2000c)

“We decided to deliver the course using the web because the experience of being an online learner is one of the best ways of learning how to be an online tutor.

“We consider that a significant factor in the success of the course was the initial decision that there should be substantial overlap between the medium of the course (online distance learning) and its purpose (how to teach, manage, design and evaluate materials and activities for online use).” (Pickering and Duggleby)

Understanding the student experience

Glass (D, 2000c) and Juwah argue that experience as an online learner will give the tutor a better understanding of the issues involved in being online such as isolation, technical hitches and communication difficulties:

“I think having experience as an online student will give the teacher/tutor a better understanding of the issues involved in being online – such as:

- “**isolation** – you may be online in a group but you still need to implement time management strategies, work load etc – very different than turning up to class once a week,
- “**empathy** – if teacher has experienced technical hitches, down servers and the like, then perhaps can more easily empathise with learner
- “**better understanding of difficulty in communicating** via tools such as email, forums, chat – ie the ‘cooling’ effect of emails, the need for clarity of written expression for instructions etc.” (Glass-D, 2000c)

“Having received training as an Online Tutor/Facilitator, I found the experience of online learning as being very useful in exposing me to the expectations and frustrations that online learners may feel. The course enhanced my facilitation and moderating skills and thus boosted my confidence as an online tutor.” (Juwah)

Recommendations

Staff development provision should:

- offer experiential learning,
- provide an appreciation and understanding of the learner's perspective,
- model effective practice.

4.3 Mode of delivery

We have suggested (Section 2) that traditional approaches to staff development may not be able to keep pace with the rapid changes and expansion demanded by online learning (Salter). This, combined with our recommendation that staff development should provide experiential and collaborative learning opportunities suggests it should be offered as online learning. Indeed, this is the approach described in many of the OTiS e-workshop case studies.

However, just as there is no one correct model for staff development (section 2.1.2) similarly there is no one correct format for delivering staff development for online tutors. As Banks (D, 2000e) suggests, it all depends on the context:

“Should adapting your course to online teaching and learning be a ‘big bang’ or an ‘evolutionary process’. There are arguments for both methods of staff development. If a course already exists as a f2f [face-to-face] course, the way it is adapted to online learning can be incremental through a series of steps – for example, starting off with course material on a web site.

“On the other hand, there is an argument for a complete re-engineering and re-design of the course as staff development.” (Banks–D, 2000e).

Noakes (D, 2000) and Gilbert-Hunt (D, 2000) highlight the need for appropriate solutions which meet the needs of the particular context and the staff:

“I think whether a complete re-design is necessary or not would depend on the starting point of the teachers’ existing philosophies and practice of teaching and learning. I think this is something that needs to be found out for any particular group in advance.” (Noakes–D, 2000a)

“I agree with the notion that it depends on the teaching philosophy of individuals, but that raises issues if you want a whole course online when individual staff may have different perspectives and ways of delivery.” (Gilbert-Hunt–D, 2000)

Salter suggests that online learning offers the advantages of scalability and flexibility as well as providing an opportunity to demonstrate good practice in online learning:

“Technology gives the potential to significantly ‘scale-up’ the number of staff who can participate (Loucks-Horsley *et al*, 1998). Online material not only models good practice, but allows staff to work at their own convenience, in private if they wish, and at their own pace. Online resources can be covered in a just-in-time fashion targeting the exact need.” (Salter)

However, online learning may not suit all learners or be appropriate for all topics. Glass, for example, uses face-to-face workshops to deliver conceptually complex or hard to teach soft-skills such as team building and change management. Face-to-face workshops are familiar and relatively easy to organise, but, as Salter argues, workshops are unlikely to be able to satisfy a broad range of needs and they have a limited long-term impact:

“It is difficult to design a one off activity that is relevant to all, given the wide diversity of needs and levels of competence that participants bring. Many staff have experienced giving up a day only to find that few of their needs were met.... The ability of simple ‘one-shot’ workshops to promote lasting change is often questioned (Fowler and Dickie, 1997; Hall and Hord, 1987; Loucks-Horsley, Hewson, Love and Stiles, 1998).” (Salter)

Workshops can provide some additional benefits when used to support online learning at strategic points such as the start, middle and end of the course, for example by pacing the course, providing motivation, personalising the experience and identifying technical problems. Mottley uses face-to-face workshops to provide motivation, structure, a sense of community and local support. Thompson and Rosie identify three benefits of face-to-face workshops:

1. Signalling to all participants that the course has started and that it is real.
2. Ensuring any technical and IT skills problems are identified and addressed.
3. Identifying participants who have intellectual or emotional problems in using the system.

As with most good practice guidelines, a varied mix of methods and approaches both traditional and new is recommended to meet the different needs and learning styles of participants.

Joining the team

Staff developers need to become an integral part of these new, evolving teams and adapt to new ways of working and new roles. Innovative and new approaches to staff development should be adopted where appropriate. For example, Finkelstein in his case study “*Providing online learning in a Humanities Context*” describes the staff development opportunities offered by the development of a new course:

“An important point about this type of teaching is the amount of time we spent monitoring and developing the system, and the manner in which this time was allocated. Course development took place over a six month period, with much front-loaded activity, such as handbook preparations, online environment creation, lecture and tutorial themed development and creation of a linked web resource site (which included researching, evaluating and matching best website materials to the established module themes).”
(Finkelstein)

Mixed mode

Staff development provision should include a range of support through a variety of media, in addition to experiential and collaborative learning. These can be a mix of traditional and new methods and include workshops, manuals and guides, online resources, self paced learning materials, texts, audio and video resources and interactive learning materials.

“A mixed approach of action learning, ie learning by doing (re-skilling of lecturers as learners), knowledge construction and a variety of tutoring models was adopted for training purposes...” (Juwah)

“The FirstClass tutor conferences were a valuable source of support, as most queries were answered within a day, either by a member of the course team or by other tutors who had been with the university for a number of years. This year, a FirstClass training event was organised for new tutors, on a regional basis, and a training pack was produced centrally for the new marking tool and the electronic assignment system.” (Morrison)

In summary

The staff development opportunities should offer a programme of individual and group activities supported by access to a wide range of online resources and tutorial input from supporting staff delivered in a variety of formats. Juwah summarises the key features of effective staff development.

- Provide opportunities for staff to familiarise themselves with the technology and software, **in a safe learning environment**. This will help in building up staff confidence.
- Make the learning meaningful and relevant to current practice.
- Be coherent and logically sequenced.
- Get the participants to learn by doing, eg acting out in turn as summariser, moderator or facilitator.
- Provide appropriate support, eg provision of simple guidelines and exemplars for staff on how to design, deliver and support online courses.
- Establish a discussion forum to enable participants to share experiences, techniques and best practice.
- Provide skills workshops to address specific needs.
- Monitor and track participants progress and give them regular feedback on their performance.
- Regularly review the course structure and content vis-a-vis its appropriateness in meeting the training objectives.
- Allow adequate time for the development of skills.
- Do not rush it.

4.4 Support infrastructure

Formal staff development opportunities and courses should be supplemented by an appropriate support infrastructure which provides:

- access to experienced and credible staff developers, ie tutorial support,
- a safe environment in which staff can practice, make mistakes and apply ideas prior to working with students,
- concrete examples of good practice,
- support for groups and individuals both face-to-face and online,
- an opportunity to share experiences,
- online help systems.

This section discusses some effective mechanisms for supporting the development of online tutors.

4.4.1 Developing the staff developers

The staff developers supporting online tutors must have credibility both as online tutors and staff developers. They also have to be self-confident in their own skills and abilities if they are to motivate staff, convince them as to the benefits of online learning and inspire them to acquire skills needed to be an effective online tutor.

This expertise and credibility can be acquired through experience, for example of running successful online courses (Kulp) or through external training and accreditation (Anderson and Simpson).

“Before creating this course, I attended classroom training at Lotus to learn about LearningSpace. And I attended brief classes on Lotus Notes. But I mostly relied on my years of experience in the classroom and a lot of self-study. I wish I could have taken my own course. I take advantage of my unique role as developer/instructor/owner to freely update, improve and evolve the course each time I teach it.” (Kulp)

“The authors ... began their term with a period of online study - completing a Certificate on Online Education and Training through the University of London - although one had previous online teaching experience. The course was of real value. Staff development was offered for all staff undertaking teaching in the programme. This staff development used the experience of both the University’s online teaching consultant and the Coordinators and was offered at the beginning of each semester. (Anderson and Simpson)

Several OTiS case studies document just a few of the many courses for online tutors which are publicly available, for example Janes, Pickering and Duggleby, Scheuermann et al and White and Moussou. These examples are fairly representative of the range of online training provision available for online tutors including a short, focused three week course on facilitation skills (White and Moussou); a stand-alone, accredited, three month, online course (Pickering and Duggleby); an accredited module which can contribute to a University degree programme (Janes); and a professional development event based on a learning community model, non-accredited and free (Scheuermann *et al*). There are many such courses currently available online.

4.4.2 Scaffolding the learning

Staff new to online learning and tutoring need a safe environment in which they can practice, make mistakes and apply ideas prior to working with students.

“The *Web Based Teaching* module aims to give the participants the opportunity to experiment with ideas on integrating Web based technology into their mainstream teaching.” (Littlejohn)

Staff need to be gradually introduced to the technology and pedagogy of online learning in carefully structured environments which provide the appropriate level of challenge balanced against the appropriate level of support. Kulp, for example, describes how tutors are supported through three levels progressing from learner to teaching assistant tutor to supervised tutor:

“All instructors follow a ‘certification’ path: complete the Introduction to Teaching in LearningSpace course, participate as a student in the course they will teach, participate as a teaching assistant in the course they will teach, and finally teach on their own, monitored by an experienced instructor or curriculum owner.” (Kulp)

Anderson and Simpson describe an organic approach which evolved over time as the staff needs became clearer and their skills developed:

“Staff development was offered for all staff undertaking teaching in the programme... and was offered at the beginning of each semester. As staff became more experienced the program changed and then split into Introductory and Advanced courses. The Introductory programme focused on online pedagogy, with a brief WebCT introduction. The Advanced course focused on enhancing existing material using WebCT functions.” (Anderson and Simpson)

Salmon advocates a five-stage model that staff work through at their own pace:

“Supported experiential learning... Online microworlds, trainee/peer interaction, structured activities leading to unstructured activities....

“... each of the five stages of the training offers just enough information and practice in the software to undertake their activities at that stage. What might be called a ‘scaffolding’ approach” (Salmon)

The framework outlined in Section 4.1 can be used to tune the balance between challenge and support appropriate to each stage of development (Figure 4.1).

4.4.3 Modelling good practice

A major benefit in taking an experiential learning approach to staff development is the opportunity it offers instructors to model effective practice in online tutoring. It allows participants to experience the benefits of good practice as a learner (Kulp) and is more effective than a demonstration (Bowskill):

“I developed the *Introduction to Teaching in LearningSpace* course with the intent of modelling the behaviours of an effective LearningSpace instructor and enabling future instructors to experience LearningSpace from their students’ perspective.” (Kulp)

“A more successful and stimulating approach to this was to try and simulate the potential experience of using such systems... Compared against the demonstration approach... this strategy enlivens the presentation and models the environment in a clear and safe way for those with perhaps few technical skills or no previous experience of technology before they might go on to try it for themselves.” (Bowskill)

Real-world problems experienced by actual tutors in real contexts and the tutors’ responses to these can provide a motivating and rich learning environment (Daele):

“Almost all the tutors and animators were involved (in fact most of the local animators in the universities were also tutors at a distance). The training was based on real case studies: by little group, we discussed situations experienced by tutors in previous years.” (Daele)

The participants can also be given the chance to practice and model good practice taking on the role of the tutor in a safe environment (Bowskill):

“...provide people with some insights into the tutor perspective is by handing over the moderator role... once the conventions mentioned above have been agreed amongst the group. These conventions provide some tools for the new moderator. The hand over of control. ...introduces a peer group learning situation and they also know you are still there in case of any problems. ...the situation becomes a possible resource for sharing experiences of being both a participant and tutor in such environments.” (Bowskill)

Modelling effective methods of online tutoring through experiential learning can result in the creation of self-sustaining self-help or peer support groups which are often an effective way of disseminating good practice (Section 4.4.5). This model of support can also be extended beyond the ‘course’ by providing the novice tutor with a mentor (Section 4.4.4).

Experiential learning in a safe and non-threatening environment allows participants to observe, practice and discover effective online strategies and behaviour.

4.4.4 Mentors

Mentors can be an effective way to provide individual support to new online tutors. Using mentors – where an experienced online tutor works with a novice online tutors and actively answers their questions, listens to them, helps them work through and reflect on problems – is seen as an effective way to support to support novice tutors in making the transition to becoming advanced beginners (Janes-D, 2000a and Glass-D, 2000b). Sometimes this is paid (Glass-D, 2000b) and it can provide evaluation data about the effectiveness of any preceding staff development. Mentor support can be provided face-to-face or online (Jawah).

“We provide mentor support for our course participants but this is currently done on a face-to-face basis. We are making plans to provide this support online, soon.” (Jawah)

Mentors can often offer the added advantage of experience of tutoring in a discipline specific context (Janes-D, 2000a and Glass-D, 2000b):

“In my work at the University..., in Nursing, I work with experienced online tutors who are matched with new online tutors to actively attend to their questions, and listen to their working through current problems...mentors have been, in my experience, a good resource and effective evaluation tool....” (Janes-D, 2000a)

“...we also consider mentoring for first time online teachers important and pay lecturers who have completed our professional development program to mentor others through their first online class.

“It's early days yet ... but from some informal feedback, it appears to be very valuable.” (Glass-D, 2000b)

Mentoring was generally perceived as a positive way forward in providing local and scalable support for new and inexperienced online tutors:

“...we intend to have an induction session for new tutors, and a mentoring system to support them in their first semester of online teaching.” (Creanor)

“Staff who have participated in projects at the centre will be encouraged to mentor other staff.” (Newby-Fraser and Clayton)

“We also had a system of mentoring, particularly to support the postgraduate students employed on tutorial work. Training was set up before module started to learn the basics of the system and the software (FirstClass).” (Finkelstein)

“We also offered mentoring to participants. The mentoring was informal, but involved one to one follow up with individuals who required particular assistance with either trouble shooting technology or designing learning activities...” (Murray)

“New tutors are also paired with an experienced tutor who acts as their mentor.” (Sharpe and Baume)

The issue of how these mentors were recruited, selected and supported was not addressed in detail by the e-workshop participants although positive experiences and outcomes were reported in cases where they were used. Our suggestions for a successful mentoring scheme include that the mentor:

- has successfully completed a period institutionally recognised staff development,
- is an active online tutor,
- is perceived to be a successful online tutor.

It is desirable that the mentor is in the same discipline or a related discipline as the mentee but not the line manager. The mentor’s role and effort should be formally acknowledged, for example, through a formal time allocation for carrying out the mentoring role or some form of financial or other reward.

A mentoring scheme can be a way of providing accessible and flexible support on an individual basis with a discipline focus in a way that is scalable.

4.4.5 Peer support

Peer support groups are a popular and widely used method of support for online tutors both formally (McKenzie-b) and informally (Creanor).

“Process tutor experiences are disseminated throughout the community of practice by means of their own online discussion and training forum, which is monitored and led by a co-ordinator responsible for the development needs of the learning support tutors.” (McKenzie-b)

“A private online conference for tutors has always been a feature of the course which has been a useful forum for exchanging information and experiences.” (Creanor)

These groups can provide practical, emotional and motivational support for tutors both during their training and when on the job. It allows them to share information, share experiences and provide feedback to each other.

“Tutors also had their own conference throughout the course, which was used mainly to keep in contact with their staff tutor, and to handle queries about the course structures and procedures. (Sharpe and Baume)

“Sharing experiences and problems amongst participants provided useful information and advice... Avenues will be explored to establish and support in-department/faculty self-help groups.” (Newby-Fraser and Clayton)

“Peer monitoring occurred where teachers set up chats within sub groups to discuss sharing the development of online learning activities and to critique each others' designs.” (Murray)

Peer support groups provide access to a human support network in what can be an isolating environment. The group can serve many different roles and functions. Daele describes a number of functions of a European peer network:

- “a collaborative learning network for trainers and teachers,
- “an European network (SOCRATES – EC) : eight universities (in Belgium : ULB, ULG, UMH, UCL, FUNDP, and the Universities of Geneva, Barcelona and Lancaster), one research centre (Gate–CNRS at Lyon) and one public office (SEAD, Ministry of Education in Belgium),
- “a human network: 82 students, 13 tutors, researchers, professors,
- “a telematic network: a virtual campus (<http://tecfa.unige.ch/proj/learnett/>) and learning support tools,
- “an action-research aiming to conceive, experiment and evaluate the introduction of Open and Distance Learning in and for the teachers training.” (Daele)

Peer support groups not always successful (Janes):

“At the beginning of the programme, a private online discussion area was made available for tutors to discuss and address common issues, problems and successes. It was not a tool that was well used. Tutors preferred to use email, the telephone, a personal visit or real-time chat to make contact and assure the quality of their work.” (Janes)

However, Janes was a minority experience and peer support groups were almost universally perceived as providing a powerful and flexible support network in a virtual environment. They are often set-up and maintained beyond the boundaries of formal staff development activities and often become self-sustaining.

4.4.6 Help systems

“Helping trainees to control their frustration is a key aspect of learning to use CMC [computer mediated communication].” (Salmon)

It is important that staff learning to become online tutors do not become demotivated or give up because of frustration and lack of support at key learning moments. Getting the balance right between challenging and supporting the learner is difficult and will change at each level of expertise (Figure 4.1). Challenges stimulate and motivate the learner but can lead to frustration if they are beyond the current reach of the learner. We need to provide appropriate sources of help to avoid frustration which demotivates the learner. The level of help must be tailored to the particular needs of the learner and the requirement for help should decrease as the learner becomes more proficient and confident in their skills. Suggested support systems include:

- online help, clearly labelled and easily accessible at all times,
- an email helpline with a guaranteed response time,
- access to peers,

- access to mentors,
- tutor support.

Examples of online resources which provide help and guidance to online learners are discussed in the next section.

4.5 Resources

In addition to human support, appropriate resources and self-study materials are an important and flexible way of supporting staff development. These can include online resources, manuals, templates and guidelines.

There are many generic online resources available providing advice and guidance for online tutors. These can overwhelm the novice tutor and assistance should be given by providing a focused set of resources such as an annotated webliography (online bibliography of web based resources) or a recommended list of resources.

4.5.1 Online resources

Online resources are particularly appropriate for supporting online tutors. They can be integrated into the online learning environment and they are accessible and flexible. The information can be generic (Newby-Fraser and Clayton) or course specific (Littlejohn).

“The learning online site will be extensively developed to include a number of online educational tips and a demonstration course.” (Newby-Fraser and Clayton)

“Learning activities and other resources were centred around the course web site comprising several sections including:

- “information about the course and assessments,
- “planned learning activities for each session,
- “a *people* section where participants publish their personal web pages and assignments,
- “an online course discussion area,
- “a reading section with links to online articles,
- “a resource section with other useful links.” (Littlejohn)

A mixed range of resources are normally available, as for example described by Sharpe and Baume:

“Course guide (overview and course process), Course plan (log and deadlines), Practice guides (practical ideas, activities for use in practice, models and techniques), Reader (underpinning theory), Assessment guide, Web site (examples of subject specific teaching materials), Computer conferencing discussion area.” (Sharpe and Baume)

The resources can include hints and tips, examples of good practice, guides, annotated bibliographies and resource lists, example courses, dynamic discussion lists for problems and solutions and frequently asked questions, simulations, multimedia and computer assisted learning. The OTiS Case Studies (Higgison, 2000) are an example of such a globally available online resource.

4.5.2 Manuals

A manual or guide for online tutors can be provided to supplement (Sharpe and Baume), or replace (Janes) staff development.

“The lack of formal training has resulted in the creation of an online tutor manual for present and future tutors. The document remains under constructions and dynamic.” (Janes)

“All ... tutors are also provided with a comprehensive series of materials on ‘Supporting Open Learning’ which give guidance and ideas for correspondence and electronic tuition.” (Sharpe and Baume)

These resources can be provide online or in paper format and be used for training or reference. The OTiS e-book “*Online Tutoring Skills*” (Higgison 2000–1) is an example of such a resource.

4.5.3 Templates and guidelines

Online tutors can also be provided with a more fine-grained supporting framework such as templates and guidelines for individual activities or topics. For example, these could include templates for creating online content and online assessment, or guidelines for facilitating online groupwork or moderating online discussions. These will normally be context specific to an institution or course.

“Innovation Centre staff will provide page and assessment templates for staff to use.” (Newby-Fraser and Clayton)

Tutors can also be provided with ongoing support including briefing or guidance sheets from course teams or module leaders.

“...tutors were provided with a briefing sheet on how to run the activity.” (Sharpe and Baume)

The benefits of this type of support are that it is tailored and specific and relatively easy to use. It may be provided by the course team in collaboration with staff developers and staff developers have an important role in disseminate examples of effective support across subject and discipline boundaries.

4.6 Recommendations

Staff development should provide a range of provision which meets the needs and learning styles of a range of learners and provides an opportunity for staff to practice skills in a safe and non-threatening environment. Ideally, the provision should combine some or all of the following (Pickering and Duggleby; and Wishart):

- pre-course guidance to ensure that the participant is fully aware of the nature of the course and has the pre-requisite online experience and technical support,
- a Study Guide that contains information to enable participants to get the best out of the course,
- online learning materials which can be accessed at times and locations which suit the participants,
- local, on-site face-to-face training and support,

- directed tasks and activities which focus on specific issues directly relevant the tutor's context,
- access to peer support groups for support and sharing of experiences and solutions.
- providing opportunities for assessment to be submitted for moderation in an electronic format,
- regular review and development of the materials as a result of participant and tutor feedback after each cohort
- development of a supportive ethos within the team of tutors through extensive communication made possible through the online medium.

5 Examples of Staff Development Models

A number of case studies submitted to the OTiS e-workshop specifically addressed staff development provision and these are listed below. The majority of these case studies focus on the development of online tutors skills at the novice/advanced beginner stages of development (shown in Figure 4.1). A few describe approaches which can be used to assist practitioners to progress towards the competent or proficient stages of development. This section uses an extended version of the Core and Wiles (2001) model of staff development to classify the case studies, although this is only one possible categorisation:

- basic skills and awareness,
- competence and confidence,
- course design and delivery,
- recognition and accreditation,
- continuous professional development,
- becoming a staff developer,
- professional communities of practice.

OTiS Case Studies which address staff development issues:

- Bowskill, Nicholas (2000) Tutoring in real-time environments.
- Cowan, John (2000) Personal development planning.
- Daele, Amaury (2000) Tutoring collaborative groups at a distance.
- Ehmann, Christa (2000) Training online tutors.
- Glass, Melanie (2000) Professional development for VET teachers: Preparing to teach online.
- Hird, Anne (2000) Online teaching and learning in teacher education.
- Janes, Diane (2000) Teaching online in a postgraduate certificate in technology based distributed learning.
- Juwah, Charles (2000) Developing effective online tutoring.
- Kulp, Rick (2000) IBM's "Introduction to Teaching in LearningSpace" Course.
- Littlejohn, Allison (2000) An accredited module in web based teaching.
- McKenzie, Jane (2000) Teaching through videoconferencing.
- McKenzie, Jane (2000) Enriching content teaching.
- Mottley, John (2000) Booting up the tutors: Beginner workshops in online learning for fellow lecturers.
- Murray, Josphine (2000) Facilitating online staff development for novice online facilitators, trainers and assessors.
- Newby-Fraser, Jenny and Clayton, John (2000) Moving an institution into mixed mode delivery.
- Noakes, Nick (2000) Starting small.
- Nurmela, Satu (2000) Online tutors with online training.
- Pickering, Fred and Duggleby, Julia (2000) Learning to teach online (LeTTOL).

- Salmon, Gilly (2000) Large scale distance training for effective e-moderation for management tutors.
- Salter, Graeme (2000) Modelling a constructivist approach to online learning.
- Scheuermann, Freidrich, Larsson, Ken and Toto, Roxanne (2000) Organising international collaborative teaching and learning in virtual learning environments.
- White, Nancy and Moussou, Mihaela (2000) Facilitating interaction in an online environment.
- Wishart, Joscelyn (2000) Online delivery of ICT in UK schools.

5.1 Basic skills and awareness

Initial approaches to staff development for online tutors are often local and driven by enthusiasts. These tend to be within a specific discipline area and their primary goal is to engage the interest and participation of the staff. These approaches fall into stage one of the Core and Wiles (2000) model: acquiring basic skills and awareness of the use of communication and information skills (Section 4.1).

5.1.1 Local workshops, local support

Mottley, in his case study '*Booting up the tutors: Beginners workshops in online learning for fellow lecturers*', describes a departmental initiative driven by an enthusiast who has the necessary experience and credibility as an online tutor having successfully completed a certificate in online education. His aim was to get his peers interested in e-learning although they had little time available, had only basic computer skills and had no prior experience of online learning.

Mottley's approach exploited local, face-to-face contact to generate motivation and gain the enthusiasm and commitment of the staff.

"Hands-on workshops were conducted to introduce fellow academic staff to the pedagogy, technology and experience of online learning."

- i. "The workshops were restricted to one hour at lunchtime and only once per week. This was the best formula found to attract participants compared to whole day, or even half day, events.
- ii. "A no-nonsense approach in the workshops dealing with absolute essentials of the topics. The workshops were primarily hands-on, but with sufficient background principles to put the activities in an educational context.
- iii. "Additional resources were provided in WebCT that were relevant and easily accessed via links. This was of particular importance to those few participants who were planning to implement online education in some form or another and who needed a more substantial pedagogical framework in which to develop their courses."

The workshop format was familiar to the participants and provided an opportunity to network and share experiences. The content was pared to the minimum but addressed both pedagogic and technical issues ensuring staff had the necessary skills to try the online activities.

“Each workshop consisted of a PowerPoint presentation, outlining the main learning objectives and basic background theory of each topic, followed by hands-on practical tasks. These tasks consisted of such activities as logging in as a student, creation of a homepage, reading and sending messages in the bulletin board, logging into their own courses and designing the welcome page.”

“Participants were able to take part in follow-on discussions around each topic in WebCT. Participants were also provided with a class of their own to develop further. This gave them a reason for logging into WebCT after the workshops.”

This case study addresses the needs of a homogeneous group of staff by providing appropriate training which addresses their lack of time and motivates them to consider the potential of C&IT for learning and teaching. The model will be difficult to scale up since an enthusiastic and credible peer delivers it in a discipline specific context. The course focuses on the role of the tutor and addresses both technical and pedagogical issues at a very basic level. The primary mode of delivery is face-to-face workshops with limited online support and activities which provides a very narrow experiential framework. Its main strengths are that it engages the staff in a discipline context, locally and at their level of experience. The main recommendations include:

- engage staff at their level of experience,
- provide local, contextualised training and support,
- use familiar methods and techniques to prepare staff for the new methods,
- provide the opportunity to try new methods in a safe environment.

5.1.2 Online learning, local support

Noakes, in his case study ‘*Starting small*’, also describes a departmental initiative driven by an experienced enthusiast. FLO (Facilitating and Learning Online) is a voluntary professional development course for language teachers in a Hong-Kong University. It focuses on online learning and facilitation. The course required a minimum of two hours per week in addition to normal work commitments for a fourteen-week period.

“FLO was developed as a result of my desire to promote online learning as an adjunct to on-campus courses within my department. It was developed and run on a voluntary basis by the facilitator and the learners were volunteers. The course was a low-level participation part time course run over the normal 14-week teaching semester. All materials were either on the course website or within the web based conference.”

“I decided to take a long term view and be patient and wait and in the meantime get myself as experienced as I could as both an online learner and an online facilitator. This would enable me to help them better when ‘they were ready’ to try things while I still kept doing things to reduce their general resistance to technology in the curriculum.”

“The course initially had sixteen volunteers but attrition took this down to twelve after three weeks and then down to eight after six weeks at which point it stabilised.”

The course was delivered online so that the participants could experience being an online learner first hand and thus would be able to empathise with their future online students. In addition, it was hoped that they would be more able to devise appropriate online curriculum

based on their personal experiences as well as their reading of the research literature from the course. The course used both experiential and collaborative learning methods.

“Learning Objectives:

“In threaded discussions via an asynchronous online discussion forum, participants will:

- “Identify skills and responsibilities students need to succeed in the virtual classroom.
- “Identify skills and responsibilities facilitators need to succeed in the virtual classroom.
- “Identify the characteristics of curriculum used in the online paradigm as contrasted with curriculum used in the traditional classroom.

“In a collaborative team project, participants will:

- “Critique the appropriateness of specific technologies with respect to curriculum and course objectives in selected online courses.
- “Synthesize the topics covered in this course by converting part of an on ground course to the online medium.”

As with Mottley this case study addresses the needs of a fairly homogeneous group of staff with a focus on addressing the barriers of lack of time and appropriate training and motivating the staff to consider the potential of C&IT for learning and teaching. However, it will be easier to scale up since the majority of the content will be available and accessible online, rather than being constrained to a specific place and time. The main costs would be providing tutorial support and tailoring the content for different contexts. The course focuses on the role of the tutor and addresses technical, pedagogical, collaborative and communication issues at a more advanced level than Mottley but at a very cautious pace. The primary mode of delivery is online discussion and collaborative activities which provide a fairly broad experiential framework. These are supported by online resources, access to a community of peers and a tutor who demonstrates good practice. Its main strengths are that it engages the staff in a discipline context in, in a flexible way, in their local environment and at their level of experience. In summary:

- be flexible and adapt the course requirements to meet the user’s needs and context, especially time constraints,
- provide online learning opportunities which are flexible and accessible,
- demonstrate by example.

5.1.3 Online learning, scaling up

Newby-Fraser and Clayton, in their case study ‘*Moving an institution into mixed mode delivery*’, describe a centralised staff development provision. Institution wide support is provided via a fully equipped ‘drop in centre’ where staff are able to reflect on their practice in a non-threatening environment. This type of approach requires institutional support and resources. The delivery of staff development is by small seminars followed by individual consultancy support to specific projects. Money from a special project fund is used to provide time release for staff. Project and seminar rooms, equipped with the appropriate technologies, are available for staff and facilitators work closely with them in developing their courses. These facilitators provide pedagogical and technical expertise, planning support, programme guidance and project management. It is crucial that staff employed in this centre have instructional design and curriculum development knowledge, effective people skills and an

awareness of professional development strategies and information and communication technologies. The centre also provides an extensive support infrastructure which includes:

- an online site (online educational tips and a demonstration course),
- templates for web pages and online assessments,
- a system of mentors,
- the establishment and support of in-department/faculty self-help groups.

The scalability of this centralised model is constrained by the funds made available to pay for the centre and for staff to be released from their job to develop an online learning project. Participants are ‘selected’ by making a successful bid to this central fund. The innovation centre tailors its support to the specific needs of individuals and provides them with the time necessary to develop their skills. The innovation centre scaffolds staff, ie the online tutors, at Core and Wiles (2000) framework level three by advising on the design of the online learning activities. This ensures that the online learning materials meet the level three criteria although the staff themselves may be at level one. This allows the online tutors to progress from novice to advanced beginner in the development of their expertise (Figure 4.1) while the quality of their students’ experience of online learning is maintained. This approach ensures:

- a project approach which support staff through the complete process and delivers online learning opportunities to students,
- a consistent and high quality online learning experience for students while staff are developing their skills,
- bespoke staff development and support, tailored to meet the needs of individual members of staff,
- sharing of good practice and experience across the institution through this centralised team of experts,
- high impact staff development but with limited scalability.

5.2 Competence and confidence

This next group of case studies address the issues which need to be explored to ensure staff acquire competence and confidence in teaching using C&IT, Core and Wiles (2000) framework, level two. These case studies explore the changes in practice, pedagogy and roles which are most effective in promoting change in online tutoring and staff development.

5.2.1 Changing practice

Hird in her case study “*Online teaching and learning in teacher education*” describes a ‘new frontier’ approach to staff development. The author had the responsibility of exploring this new and unknown terrain of online learning on behalf of her peers and identifying ways and methods to help them make the same journey.

“...one of my responsibilities is to develop workable models of technology integration for other faculty members in the School of Education. Any model I develop must be easily adaptable for instructors with limited time to devote to learning new technical skills.”

The focus is very much on the pedagogy and learning by experience through informal exploration and tapping into the participants’ interests and encouraging them to meet these needs online:

“My recommendation for others entering into online teaching is to take advantage of opportunities to participate in online learning first.”

“As instructor, I had no formal training prior to these courses, but I do have extensive experience with instructional technology and have researched middle school students’ Internet use. Since I learn best at the point of need, I tend to avoid formal training in favour of learning through experimentation and collaboration as I need new skills.”

“A good starting point is to help teachers identify their own personal learning needs that could be met online. For example, during a two-hour period that I was working on a project in a high school library recently, several teachers came in and used the Internet to check stock market performance. If this is an interest they have, it is a good place to start to extend their online learning skills. This is different from the prevailing professional development model in which teachers are expected to address curriculum issues as the first thing they do. In other words, they are asked to teach with the technology even before they have had a chance to learn with it. One of my goals in using an online format for my teacher education courses is to provide teacher education students with a technology-rich learning experience before I ask them to teach with the Internet.”

Hird recognises that old habits and practises are easy to fall back on and replicate online. It takes focus and effort to implement and maintain change. The online tutors, and staff developers, have to support and encourage the students through this change, as well as themselves.

“The most significant barrier that I encounter in my online teaching is the need to develop a new understanding of my role and responsibilities as teacher in an online environment. As with any organizational change, there is a strong inclination on the part of both teacher and students to fall back into old roles and routines when the uncertainty of the new learning environment and interactions become uncomfortable.”

Hird suggests that integrating the technology into the whole course experience, rather than using it as an optional add-on is an effective way of promoting change.

“Avoiding the tendency to treat technology use as an add-on is critical to promoting student participation and in creating a model, which can be adopted by other faculty members.”

She also emphasises the need for a balanced and a reasonable workload for online tutors. A rule of thumb for successful integrating online learning into everyday practice is to remove one traditional activity for every technology based one you add.

“I paid careful attention to what I subtracted from traditional course requirements. In other words, for each technology based assignment or activity, I took out an activity typically included in teacher education courses. For example, the online discussion replaced weekly reflection papers traditionally required in the teacher education courses. This helps to make the technology use integral to the course and creates a model that is manageable for all involved.”

It is essential to rethink our practice and demonstrate alternative solutions through modelling good practice. Hird recommends peer support groups and self-reflection as effective support mechanisms for maintaining change.

“The two greatest assets for me in overcoming these barriers have been the teaching journal that I maintain and my constant communication with online colleagues at other institutions worldwide. The journal helps me to clarify the issues that I am facing, while my online professional network provides me with support and solutions as I work through these issues.”

This case study describes a very flexible and customisable approach to staff development. The focus is on promoting a change in pedagogy through the experience of online learning, engaging participants’ by encouraging them to learn of a topic which interests them, before asking them to consider how to teach online. The model acknowledges the barriers of time and limited technical skills. This approach focuses on the integration of online elements into the learning environment, with online activities replacing rather than adding to traditional methods and careful thought given to the total experience and workload. The main method is by exemplar and demonstration of the suggested approaches with a focus on pedagogy and supporting long-term change. Hird recommends:

- an informal exploratory approach based on experiential learning and driven by the learners own interests,
- a model which is easily adaptable for staff with limited time to devote to learning technical skills,
- a focus on developing a new understanding of the role and responsibilities of tutors in an online environment, which is essential to promoting long term and sustained change,
- integrating online activities into the learning environment by removing one traditional activity for each new technology based activity added,
- supporting change through peer support groups and self-reflection.

5.2.2 Changing pedagogy

Salter documents the failure of traditional staff development methods such as face-to-face workshops to bring about a long term, permanent change in pedagogy, partially due to time constraints.

“Over 25 two-hour face-to-face workshops were provided in ‘Getting Started’ and Advanced applications of PlatformWeb. While pedagogical aspects were touched upon during these workshops, particularly in the use of online discussion groups, the small amount of time available meant that the focus was on the mechanics of Web based teaching.”

“Initial staff development was provided through well-attended workshops. However, it has become apparent that following these workshops most simply want to use the environment to electronically post lecture notes. This has been observed at other universities. Many of the online subjects currently promoted as ‘flexible’ often do little more than place lecture notes on the Web (McNaught, Kenny, Kennedy, & Lord, 1999). The danger is that traditional forms of staff development may not be able to keep pace with the rate and pace of change.”

Lack of staff time to attend workshops and carry out follow-up activities and the inflexibility of a fixed time and location are particular barriers. It is also difficult to meet a range of needs and it is difficult to provide a co-ordinated and coherent programme of development.

“Evaluations from the workshops clearly demonstrated that time is the major barrier for staff to attend staff development activities and then to follow-up (eg by developing online teaching resources). Activities that are scheduled require that the staff member is available at that particular time and for that amount of time. Staff are often reluctant to give up large amounts of time, particularly if they have concerns over the relevance of an activity. It is difficult to design a one off activity that is relevant to all, given the wide diversity of needs and levels of competence that participants bring. Many staff have experienced giving up a day only to find that few of their needs were met. Negative experiences like this make it more difficult to attract participants in the future. Where staff do make the effort it is often to a single event rather than being a part of a coordinated staff development plan.”

We need to change the ways in which we deliver staff development to demonstrate and reflect the new skills and new ways of learning we are trying encourage staff to adopt. We need to demonstrate effective practice by example:

“Educationally ineffective or inadequate patterns of online teaching may become habits embedded in online teaching practice. Therefore, it was decided to develop an online staff development module on online teaching where the pedagogy matches the practice.”

“This has lead to the development of an online teaching module, based on constructivist principles, which attempts to model good pedagogical practice in online teaching.”

In this mixed mode approach some aspects of the development are delivered online and some aspects by face-to-face workshops:

- “2 hour ‘Getting Started’ Workshops.
- “2 hour Advanced Workshops.
- “Online module trial 10 weeks (contribution of one post per week required).

Salter argues that it is essential to address pedagogic issues up front at the same time as the technological skills. While technical skills are important, pedagogy should be clearly flagged as being of equivalent or greater importance. If pedagogical issues are not addressed it can lead to familiar but inappropriate styles of teaching being transferred to the online environment.

“While teachers clearly cannot make effective use of the technology until they gain technical competence, it may be a mistake to leave the educational issues to a second stage. This can falsely signal that they are of lower priority. More importantly, teachers will often use the technology immediately after they have attained a degree of competence. If this is done without adequate consideration of the educational issues, it may lead to the perpetuation of didactic teaching styles in the online environment. Pedagogical issues need to be ‘brought up-front as a professional development priority from the beginning and, in the initial stages, developed in teachers concurrently with the development of technical competence’ (Fowler and Dickie, 1997).”

Online delivery of all or a proportion of the staff development for online tutors provides the coherence of an integrated programme with the flexibility needed by individual members of staff and the scalability required by institutions.

“Technology gives the potential to significantly ‘scale-up’ the number of staff who can participate (Loucks-Horsley *et al*, 1998). Online material not only models good practice, but allows staff to work at their own convenience, in private if they wish, and at their own pace. Online resources can be covered in a just-in-time fashion targeting the exact need.”

Salter suggests that for change to take place it has to be adopted at all levels of practice including staff development. Online delivery meets many of the needs of both staff and the institution. Online staff development can address the barriers of time and inappropriate training, providing flexibility, motivation, scalability and demonstrate good practice. Salter argues that online staff development is essential because:

- it provides an opportunity for staff to experience online learning as a student,
- it demonstrate good practice in online tutoring,
- it allows essential pedagogical skills to be addressed and developed from the start,
- it promotes long term change more effectively than traditional workshops,
- it provide staff with positive experiences of online learning and motivates them to develop the necessary skills,
- it is flexible enough to cater for a range of staff skills, needs and learning preferences,
- it is accessible form a wide variety of locations and at times which suit the participants,
- it is scalable,
- it places staff in the appropriate environment to try out their new skills with their own students.

5.2.3 Changing roles

McKenzie has provided two case studies which address staff development. ‘*Teaching through video conferencing*’ (McKenzie-a) addresses the evolution of staff development support for learning and teaching via videoconferencing, a synchronous technique. ‘*Enriching Content Teaching*’ (McKenzie-b) addresses the new and evolving roles of online tutors.

This latter case study is illustrative in demonstrating the initial uncertainty and changing roles which may emerge when online learning is introduced into an institution. In this example, the role of the tutor is split into two: a subject tutor and a learning support tutor. The role of the support tutors was new and undefined, their tasks and credibility unclear.

“Because of the unusual situation of having both subject and process, tutors, for many, the role of the learning support tutor was not clear from the outset. This created uncertainty that took time and effort to resolve. Establishing the credibility and legitimacy of the learning support tutor, both in the minds of the course members, and with the College tutors became a real critical success factor in the whole process.” (McKenzie-b)

Initially a traditional approach was taken to the staff development through workshops which attempted to address both technical and pedagogical skills:

“Initial training in the use of the software was provided through a face-to-face workshop for the course members, and tutors had training in both facilitation skills and the use of the technology. The technology training was unsatisfactory, because although it taught people how to use the software, participants did not absorb enough about the effects of a different mode of interpersonal interaction.”

The uncertainty of their position and role proved difficult for the learning support tutors to cope with. New approaches to staff development and support had to be adopted. The focus moved to developing their communication and collaborative skills to enable them to support each other, creating a community of tutors, in addition to the support available from staff developers.

“Developing an appropriate skill set amongst the learning support tutors is critical to the success of a programme that seeks the intimacy of collaborative team learning, in a virtual environment. Critical competencies include the ability to develop a supportive and empathetic online persona through the text based medium, strong communications skills, multi-cultural sensitivity, an enthusiasm for the technology, but a critical attitude to its impact on learners' progress.”

“For the learning support tutors, being detached from the subject content was a major source of discomfort. It required considerable training, in face-to-face workshops, and through an online training database, to help them understand the contribution that they could make to the quality, depth and breadth of learning for the course members they were responsible for. Building strong relationships on line seemed to be a skill that many found quite difficult. Much was invested in communication skills training, workshops to help them learn from one another. Constant re-enforcement and encouragement from a central lead tutor, responsible for the welfare of the learning support tutors, was critical to the working of their community of practice.”

The staff developers adopted a flexible approach using a wide mix of delivery mechanisms including face-to-face, audioconferencing, a training database and online learning communities. However, Mackenzie-b believes that the key to success was a willingness to be flexible and adapt the training to meet the evolving needs of the participants.

“Face-to-face workshops were essential in order to correct problems, and build confidence and relationships between course participants and learning support tutors. Audio conferencing was a useful interim mechanism to address key issues that needed urgent resolution, through a discussion between ... tutors and the course participants. One of the greatest enablers of success was a willingness to make changes during the course process, based on the feedback from the participants.”

Peer support networks can sustain successful, ongoing staff development and training. They allow the cumulative group experience and expertise to grow rapidly and provide examples of real problems and practical solutions.

“Process tutor experiences are disseminated throughout the community of practice by means of their own online discussion and training forum, which is monitored and led by a co-ordinator responsible for the development needs of the learning support tutors.”

“Now having a wealth of practical experience of the potential pitfalls of this approach, it has become easier to prepare the tutors with concrete examples of recurring difficulties.”

MacKenzie-b suggests that while face-to-face methods are important to create a sense of community and instil confidence, an online element is critical to provide the flexibility and responsiveness required where the tutor's roles are changing rapidly. In this case study the context is uncertain and the staff development focuses on the skills tutors need to adapt and evolve, ie communication and collaborative skills. Peer networks and online resources of exemplars and experiences are a key strength in this approach. They are attempting to develop

the tutors to the advanced beginner or competent stage of development (Figure 4.1) through supported experiential learning on the job and providing a range of responsive and adaptive support mechanisms. Online methods of staff development provide:

- flexibility which is needed to address new and evolving staff development needs, especially where the role of the online tutor is new and unclear,
- peer support networks which are an important source of support in a changing context,
- an evolving online resource of exemplars and experiences.

5.3 Course design and delivery

The four case studies discussed in this section describe approaches to staff development which demonstrate the embedding of C&IT in course design and delivery, level three in Core and Wiles (2000) framework. These approaches:

- use a scaffolding approach to support the progressive development of skills,
- integrate the development of technical, information handling and social/communication skills,
- attempt to move tutors to the advanced beginner stage of development (Level 2: competence and confidence in teaching using C&IT in the Core and Wiles (2000) framework).

These programmes are essentially professional development courses for online tutors. Three are delivered to in-house tutors (Salmon, Ehmann, and Kulp), and one is open to international subscribers (White and Moussou).

5.3.1 Large scale training at a distance

Salmon, in her case study “*Large scale distance training for effective e-moderation for management tutors*” describes a 5 step model for developing online tutors. It is probably the most widely know of these cases and more detailed descriptions are available in her book ‘*e-Moderating: the key to teaching and learning online*’ (Salmon, 2000) and via her web site at <http://oubs.open.ac.uk/e-moderating/>.

This ten hour, self paced, online course was originally developed to meet a requirement to train large numbers of tutors at the UK Open University Business School. Salmon uses a 5 step model (Figure 5.1) that develops the online tutor’s (or e-moderator’s) technical and ‘moderating’ skills in parallel. This staged or scaffolded approach ensures that the tutor is comfortable and experienced in basic skills and techniques before moving onto ones that are more advanced and challenging. The target audience are busy professionals, experts in their fields, and distributed throughout the world.

Figure 5.1 shows the progress of the online tutor through the five stages of learning necessary to become an effective online tutor: access and motivation, online socialisation, information handling, knowledge construction and development. The model addresses issues of support, motivation, evaluation and evidence of institutional acknowledgement:

- “an average tutor would be expected to devote some ten hours to the CMC training programme,
- “the design would be based on the five-stage model previously developed ...,

- “a core of online e-moderators (online trainers of the online trainers) would be selected and trained to e-moderate the individual training conferences within the programme,
- “evaluation and action research would be based on tracking the trainees through the stages in the programme by a series of online conferences and questionnaires of a quantitative and qualitative nature and through monitoring the work of the trainees online after the training finished and the tutors commenced working with students,
- “A small fee and a sum for telephone expenses, and a certificate of completion would be provided that the trainees could claim on completion of their exit questionnaires.” (Salmon)

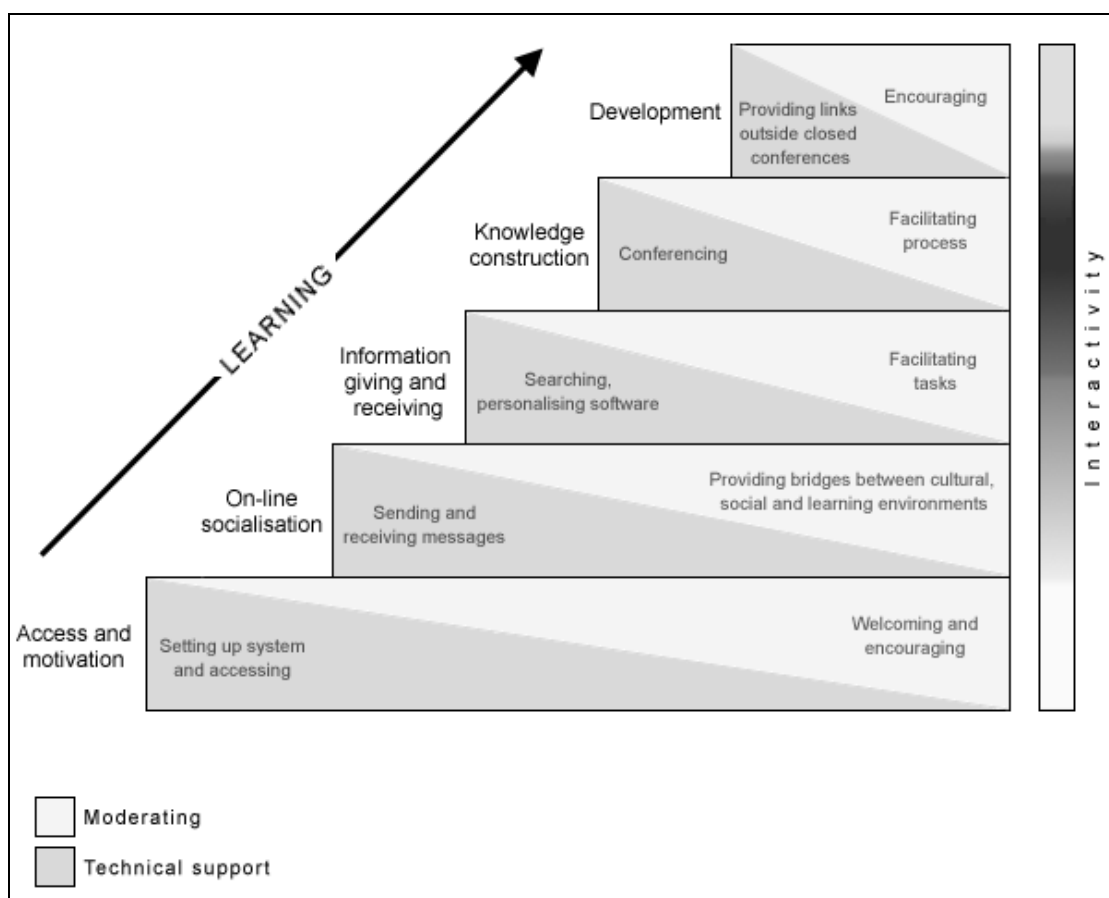


Figure 5.1: 5 Step Diagram (E-Moderating, Salmon, 2000)

A by product of this approach to the training and development has been the emergence of an active, online professional developmental community of tutors:

“An online community of OUBS tutors has also emerged, centred on discussion and information conferences known as the ‘SCR’ (Senior Common Room). The exchange of good practice, support, collaboration – and the flattening of communications with the full time course team – are welcome. We did not anticipate the importance and strength of these communications devices at first but they have proved an unexpected bonus. There is little doubt that the training has produced new cohorts of OUBS tutors comfortable with communicating electronically. This has an almost immeasurable impact on the sense of professional community that this generated.”

This model is scalable and efficient in delivering training to large numbers of staff while being flexible enough to meet the needs of individual learners. The key features embedded in the method are:

- Training to teach online takes place through the medium itself and in interaction with other learners and those slightly more experienced, with only the minimum of back-up software and print.
- Five clear stages, ie access and motivation, socialisation, information exchange, knowledge construction and development (Figure 5.1).
- Each stage involves three aspects: learning to use the techniques and the software to achieve that stage, learning about the affordance of the medium and learning how to teach, tutors and e-moderate others through that stage.
- The evidence it provides to demonstrate the success of the technique (eg, examples, data from feedback, research findings, and evaluation studies).

5.3.2 Addressing institutional values

Ehmann in her case study “*Training online tutors*” describes the training provision for online tutors at a company which sells an online tutoring service to colleges and universities in the USA. At the time of writing they specialised in support for essay writing and mathematics. The tutors are experienced educators but new to online tutoring and they go through a selection process.

“Although all of the tutors have had extensive face-to-face teaching and/or tutoring experience and have passed simulated tutorial exercises during the selection process, most of the tutors have never engaged in online tutoring endeavours.”

“...The intention [of the selection process] was to identify the ways in which individuals intuitively responded to tutoring in an online context.”

The duration of the programme is similar to Salmon’s course – eight hours. The training is used to develop the new tutor’s understanding of the company philosophy and values as well as the technical and pedagogical aspects of online tutoring. The participants perceived this as an important aspect of the training.

“An interactive training programme has been designed to introduce and orientate new tutors to: the values that drive the organisation’s tutorial practice; some of the complexities and distinctive elements of online tutoring; and the technological features of the online environment in which they work...”

“Tutors also highlighted the importance of understanding the pedagogical mission and principles of the organisation. The articulation of these principles as they apply to subject specific contexts was also appreciated.”

This is achieved by addressing the ethos and values as an integral part of the staff development programme:

“To achieve this, our tutors' training programme had three main aims:

1. “To introduce new tutors the values that drive Smarthinking's practice. These values included: professionalism, facilitation, confidence building, accommodating diversity in the online environment, and student management.
2. “Provide opportunities for new tutors to learn about online communication including: various online environments, synchronous and asynchronous communication, ‘netiquette’, establishing a rapport with tutees.
3. “Allow individuals opportunities to discover the ways in which these tutoring values can be applied to an online learning environment.”

The training programme was divided into three phases:

- self paced modules,
- web based questions,
- a real-time practicum.

A barrier which emerged during the online training was the difficulty in forming an online relationships and a community of peers. Both of these were seen as essential elements in supporting the cognitive and affective aspects of the tutors' development. This experience differed from that documented by Salmon.

“The main barrier that emerged during this training process was the difficulty of developing ‘community’ amongst a group of geographically dispersed individuals. ... The difficulty within the online context was highlighted at a number of key points during training. For example, during the self paced modules, all of the debriefing sessions were one-to-one (between the tutor and a coordinator). While careful not to minimize the importance of the information presented in the modules, the majority of tutors expressed feelings of isolation from their colleagues.” (Ehmann)

A key quality control mechanism is the ongoing monitoring and evaluation of the tutor's performance and the provision of regular feedback. This process is bi-weekly, starts during the training period and continues throughout the working life of the tutor. Regular online staff meetings and peer support groups maintain this ongoing development process.

“Coordinators undertake formal bi-weekly evaluations of tutor performance followed by debriefing sessions as well as less formal, daily monitoring of tutorial activities. Monthly staff meetings are held via conference calls. These meetings focus on the specific challenges, practicalities, and complexities of working with a diverse student population in an online learning environment. Moreover, tutors communicate with one another regularly via listserv and instant messaging functions. This communication is an opportunity for tutors to engage in conversations about their practice.”

Ehmann believes that the most important part of any training programme is the practicum, which realistically simulates the real tutoring environment. The training must be scalable and flexible:

“...the cornerstone of a training programme must be the real-time, interactive practical experience of working in a designated online learning environment. Simulated exercises during the practice can be created or based on previous face-to-face and/or online interactions and problems. Finally, tutor training should be structured such that it is scaleable and can accommodate a large tutor pool, as well as “one-off”, emergency training sessions for new tutors who start half way through a semester. For example, within the tutor group at Smarthinking there is a hierarchy of lead tutors who are qualified to help train and mentor new tutors.”

Key elements, which contribute to the success of this approach, are the:

- selection of experienced educators who have a proven aptitude for online tutoring,
- realistic simulations of actual practice,
- induction of tutors into the values and ethos of the company,
- commitment to ongoing staff development and quality control.

5.3.3 Beyond the course

Kulp in his case study “*IBM's 'Introduction to Teaching in LearningSpace' course*” describes an integrated in-house staff development programme that supports the learner through three stages of development: student, teaching assistant and mentored teacher.

“All instructors follow a ‘certification’ path: complete the Introduction to Teaching in LearningSpace course, participate as a student in the course they will teach, participate as a teaching assistant in the course they will teach, and finally teach on their own, monitored by an experienced instructor or curriculum owner.”

The course is based on an experiential learning approach and modelling effective online behaviour:

“I developed the *Introduction to Teaching in LearningSpace* course with the intent of modelling the behaviours of an effective LearningSpace instructor and enabling future instructors to experience LearningSpace from their students’ perspective.”

The staff developer is accredited and has credibility and supports the need for appropriate and accessible training:

“Before creating this course, I attended classroom training at Lotus to learn about LearningSpace. And I attended brief classes on Lotus Notes. But I mostly relied on my years of experience in the classroom and a lot of self-study. I wish I could have taken my own course.”

Kulp endorses the view that the training must be flexible and adapt to the learning needs and styles of the individual learners.

“I take advantage of my unique role as developer/instructor/owner to freely update, improve and evolve the course each time I teach it.”

This course is successful because it:

- scaffolds and supports the development of the tutor beyond the end of the course,
- is continuously reviewed and modified in response to feedback from the learners.

5.3.4 Courses vs self-study

White and Moussou in their case study “*Facilitating interaction in an online environment*” describe a three-week online course on online facilitation. Details are available online at <http://www.fullcirc.com>.

The course is intensive and fast-paced. Therefore, although it is accessible from any place, it requires a significant commitment of time during a specific period. This approach differs from that taken by Salmon and Ehmann, but is similar to that described in Kulp.

“The course is actively open for three weeks with the learning space open for an additional one-month period for students to complete their mini projects. A CD-ROM of the entire course is provided to each student. Students were expected to participate a minimum of 1-2 hours per weekday, and most reported spending additional time, especially on the two weekends during the course.”

The course is firmly grounded in experiential learning and uses a rich mix of media including the web, telephone and real-time chat.

“...a course taught through didactic materials and an experiential process where participants can not only think about how they would facilitate online, but ‘feel’ it as well.”

White and Moussou argue that an intensive course where participants focus on developing their skills and have the opportunity to practice immediately is more successful in embedding change in practice.

“We chewed on course length for some time, trying to balance our workloads and available learner time. We finally settled on three weeks, but have had many discussions of the pros and cons.

- “It is easier to hold learner attention for a shorter period of time in the online environment when there are no particular motivations other than learning (ie grades, credits, boss is making me do this, etc.) In the ‘attention economy’ it is easy to lose learners to the demands of daily life, especially with no F2F [face-to-face].
- “An intensive experience has the capacity to grab us, to transform us. It seems to tick open some doors that remain shut when things are slower and spread out. People come up against their assumptions faster and thus we seem to get into deeper interactions than a slower ‘conversation’ online.
- “We, as the tutors, like to give focused attention. With consulting jobs, etc, it is harder to do that over a longer period of time when one or both of us in on the road – access is slower, less reliable, etc. So we have chosen in the past to go full bore for the shorter period of time.

- “The shorter period of time makes learner projects and outside explorations more difficult. We have considered doing some alternating weeks – online didactic for a week, a week ‘off’ for students to read, work on projects, then back ‘into class’ etc.
- “Piggy backing an intensive class with a longer period of time for reflection and feedback – we leave our course space open for one month after “class” but find it little used. Thus I am concerned about this approach. There needs to be that engagement.”

White and Moussou report that the participants are very active during the intensive phase of the course but few participate during the follow-up month in which no activities are scheduled.

“The course is actively open for three weeks with the learning space open for an additional one month period for students to complete their mini projects. A CD-ROM of the entire course is provided to each student. Students were expected to participate a minimum of 1–2 hours per weekday, and most reported spending additional time, especially on the two weekends during the course.”

This level of commitment, structure and scheduling will not suit everyone. However, an intensive course, when compared to self paced alternatives:

- provides pacing and motivation,
- embeds new methods in everyday practice through continuous use,
- provides an intense and in-depth experience.

5.4 Recognition and accreditation

This group of case studies describe staff development courses which are accredited and, in consequence, generally of longer duration than those described in the preceding section. These address level four of the Core and Wiles (2000) framework of competence in developing skills in the application of communication and information technology skills (C&IT) in education: recognition and accreditation of practice using C&IT in learning and teaching.

Two case studies (Littlejohn, Juwah) describe modules which form part of an institutional professional development qualification; a third (Janes) describes a similar module that is marketed to a wider audience, beyond the institutions own staff, and addresses broader, generic issues of using technology to support learning and teaching. Pickering and Duggleby describe a stand-alone, accredited module focusing on the skills of online tutoring and which is delivered entirely online to an international audience. Finally, Wishart describes in-service training for teachers in UK schools.

5.4.1 Web based teaching

Littlejohn in her case study “*An accredited module in web based teaching*” describes a 15 credit Master’s level module which is delivered by a mixture of face-to-face sessions and online interactions. This is one of two modules which form part of a Postgraduate Certificate/Diploma in Advanced Academic Studies offered by a UK University; the second module addresses Internet Communication.

“The *Web Based Teaching* module aims to give the participants the opportunity to experiment with ideas on integrating Web based technology into their mainstream teaching. Basic IT literacy skills and both web and email access were pre-requisites of the course, however it was assumed that participants could not create a web page.”

The course is based on experiential learning, is set in the student’s specific work context, addresses a real teaching situation, and is underpinned by reflection:

Throughout the course, participants were placed in the role of an online learner enabling them to develop a clearer understanding of any potential problems which students may encounter. Participants were required to identify areas of their own teaching which could be improved using Web based technologies. Working together and with tutors, they designed and developed online learning activities within an existing integrated virtual learning environment.”

The course focuses on the importance of interaction and feedback in learning. It engages participants by generating meaning and understanding through discussion and applying appropriate models of online learning to real teaching situations. It is delivered by two experience staff developers who are experts in online learning:

“The *Web Based Teaching* module was developed collaboratively by the two tutors based on their previous experience in facilitating staff development workshops.”

It is supported by a comprehensive infrastructure of resources, advice and help. Participants work as a group, peer reviewing each other’s work and providing a support network. Littlejohn suggests a set of core components for the online environment:

“Learning activities and other resources were centred around the course web site comprising several sections including:

- “information about the course and assessments,
- “planned learning activities for each session,
- “a *people* section where participants publish their personal web pages and assignments,
- “an online course discussion area,
- “a reading section with links to online articles,
- “a resource section with other useful links.”

Littlejohn offers a number of recommendations to staff developers approaching a similar situation:

- Illustrate the importance of developing learning activities with appropriate feedback by providing examples of good and bad practice.
- Give some indication of the process behind creating these examples.
- Strongly emphasise the importance of creating a clearly documented storyboard.
- Set up an online course administration system and ensure that one tutor has overall responsibility.

- Create an FAQ section illuminating potential technical problems. This can be expanded as the course continues.
- enable access to the course web site prior to the first session to allow participants to familiarise themselves with the course structure.

This approach combines the pacing and motivation offered by face-to-face workshops with the flexibility of online learning. Pedagogy and the needs of the learners are at the core of the module and participants have a useable, quality resource on completion which they can use with their students.

5.4.2 Effective online tutoring

Juwah in his case study “*Developing effective online tutoring*” describes an accredited module developed to meet the needs of staff supporting online learning.

“The pedagogical goals are:

- “to develop staff’s skills in being competently able to deliver teaching and support learning online.
- “to effectively embed the use of C&IT in teaching/learning situations.

However the course takes a broad view of what online learning includes:

“Incorporated as part of the new course content is the training in the use of videoconferencing and telephone tutoring. This is to ensure that we are taking a broader view or perspective of **Online Learning** rather than the limited focus on text based computer conferencing.”

The module is based on action learning and the participants are supported by a system of tutors and mentors. The module uses a system of self, peer and tutor based assessment.

“A mixed approach of action learning, ie learning by doing (re-skilling of lecturers as learners), knowledge construction and a variety of tutoring models was adopted for training purposes....

“Assessment is on a continuous basis and undertaken by a combination of self, peer and tutor assessment.”

This latter approach caused some initial anxiety amongst the participants which had to be addressed:

“The main learning problems that our trainee online tutors have at the initial stages of training are:

- “being concerned in having their work critically reviewed and assessed by peers;
- “having some difficulty reflecting about their learning in the online environment.”

In summary, Juwah makes a number of recommendations for an effective course:

- It is essential that training is linked to specific objectives.
- Ensure that the course is well structured and logically sequenced and underpinned by sound pedagogy.
- Devise activities which will cater for all learning styles.

- Establish ground rules for participation and get the participants to abide by them.
- Encourage participants to log on regularly and to practise tutoring skills.
- Run a pilot course, evaluate the course, modify as appropriate and then roll out it out as your standard course.

5.4.3 Technology based distributed learning

Janes in her case study “*Teaching online in a postgraduate certificate in technology based distributed learning*” describes an international course available online from a Canadian University. The course was intense in that it required 10–12 hours per student per week for 13–16 weeks. This case study was also unusual in that it specified quality assurance criteria for workloads:

“The practice with the Distance Education & Technology unit ... had been to recommend the limit of a tutor-student ratio to 1:20, 1:25 where possible.”

The approach is similar to the case studies outlined above: experiential, work-based learning:

“Work-based learning, projects, activities and papers involved learning by doing. Using real-life examples and scenarios are encouraged as is sharing of practice and theory. The strength of the programme is the online collaborative discussions, and presentations between participants and the interaction between online tutors, participants and international guest tutors.”

However, unlike the two previous examples and despite the module content, some of the module tutors, who were not part of the core team, were inexperienced in online tutoring. There was no formal provision to train these inexperienced tutors:

“There was no formal tutor training in advance of this program. Most of the tutors had personal experience in online teaching and learning. The team leader ... is a well-known author in the field. From the beginning the core tutor team worked together in the ... unit. This allowed for impromptu advice and agreed-upon action. When we worked with tutors away from the core group, one of the core group often acted as liaison answering questions or offering advice if needed.”

So, despite the informal and ad-hoc support arrangements which were in place the staff developers’ lack of experience did have consequences for them, the course, and the participants:

“The lack of training did make for an uneven tutoring balance among the core tutors, in the beginning. A cost-benefit analysis of the first offering of the first course in the certificate revealed tutor ‘time-on-task’ to range from 180–400 hours in the same 13 week period (See Bartolic-Zlomislic and Bates, 1999).”

Janes final recommendations include the need to provide support for new tutors and students including:

- the careful professional development of the tutor who has a content knowledge but little or no online teaching experience,
- the preparation of documentation for students to use early in the process, to answer frequent questions,
- the assistance of a practised mentor to assist the new tutor with any difficulties.

5.4.4 Learning to teach online

Pickering and Duggleby in their case study “*Learning to teach online (LeTTOL)*” describe a commercially available professional development course where the participants are mainly teachers, lecturers, trainers and managers in education. The course is delivered entirely online over a period of three months.

“LeTTOL concentrates on giving and developing the communication, pedagogic, and information handling capabilities that all online tutors need. We believe that most deep learning is best done as a collaborative activity, and we are firmly committed to:

- treating learners as individuals;
- responding quickly to enquiries, questions, and comments;
- simple, spare, web-design;
- providing timely, clear and supportive tutorial feedback.

“Our aim is to run LeTTOL so as to demonstrate online distance learning in an exemplary way.”

The philosophy of the course is firmly rooted in experiential learning, experiencing the online learning process as a student. They base their own course on the philosophy they espouse to their students:

“We believe the success of the project has been built around three factors that are transferable across disciplines.

- Firstly, we have relied on generic Internet technology to deliver the course materials to the participants...
- “Secondly, we have recognised the potential for the Internet to transform Distance Learning from at best a one-to-one exchange between learner and tutor into many-to-many communication between participants. Recognising the benefits of social interaction as a motivator and of collaboration in promoting deep learning we have planned the course structure to encompass these.
- “Finally, we have recognised the centrality of the tutor to this process. Facilitating an online course is not an easy task. It is a time-consuming and challenging experience that requires the use of ‘soft’ skills for promoting and building a sense of group within the Learning Sets. Ultimately, however, it is very rewarding.”

Their recommendations on quality assurance procedures and course requirements reflect much of the good practice already discussed and include:

- the development of online pre-course guidance to ensure that the participant is fully aware of the nature of the course and has the pre-requisite online experience and technical support,
- the development of a Study Guide that contains information to enable participants to get the best out of the course,
- providing opportunities for portfolios to be submitted for moderation in an electronic format,

- regular review and development of the materials as a result of participant and tutor feedback after each cohort,
- the development of a supportive ethos within the team of tutors through extensive communication made possible through the online medium.

5.4.5 Online delivery

This case study by Joyce Wishart describes a UK government funded staff development scheme for teachers and librarians in UK schools. The accredited course was developed and delivered by external providers and aimed to bring the ICT skills of in-service teachers and librarians up to the level of newly qualified staff. The program used a work-based learning approach which combined online delivery of materials with local tutorial support. Peer support networks and focused, job related activities allowed staff to gain experience of teaching and learning using ICT.

“The participants meet each other and the tutor at the introductory face-to-face session. They then access the learning materials via the web. Once they have read the information and examples, they undertake some work in the classroom and feedback their thoughts and reflections to the group through the online discussion.”

“Teaching and learning aims were laid down in a set of expected outcomes. ... They include an understanding of:

- “How to use ICT to enhance teaching.
- “How to use ICT in teaching the whole class.
- “Planning, including the use of ICT for lesson preparation and the choice and organisation of ICT resources.
- “Assessing pupils’ work when ICT has been used.
- “Professional use of ICT to keep up to date, share best practice and reduce bureaucracy.

“Online support for experiential learning was chosen to provide a solution that would offer support when required, would be accessible from the participants’ schools and to provide a foundation on which to build the regional networked communities.”

Wishart reports variable results depending on the skill level and mix within the collaborative groups:

“The experiences have been variable, largely due to the individuals taking part, from those who have previously avoided opportunities to learn how to use ICT in their teaching and are now being forced to, to those who are grabbing this opportunity with both hands and contributing regularly to the discussion groups on activities they have introduced to their classes. The balance of individuals from each camp in the group dictates how well the discussion flows”

Wishart also emphasises the importance of the tutors being experienced teachers from the same regional area who would understand the context and the constraints under which the participants worked. A specific and unexpected barrier encountered was a lack of basic IT keyboarding skills in many of the participants.

This case study highlights the need for:

- continuous and ongoing training for all staff, not just those new to the role, especially in the area of ICT where development is very rapid,
- establishing the actual baseline of staff skills rather than making assumptions.

5.5 Continuing professional development

Core and Wiles (2000) framework for developing staff's skills in the use of communications and information technology only goes so far. It does not suggest a way of addressing the development needs of staff who are at the 'advanced beginner' stage of development and beyond (Figure 4.1). It is essential to provide staff with the skills, tools and attitudes which will enable them to continue to develop their expertise as online tutors. One approach is to develop their skills of action research which provides them with a tool that they can use to review, evaluate and develop their practice. Staff should also be encouraged to become reflective practitioners (Schon, 1983) who reflect on, and develop, their own skills as part of their professional practice.

5.5.1 Action research

Cowan in his case study '*Personal Development Planning*' describes a project where the tutors undertake self-development through action research and provide support to each other.

"I would describe all of this additional activity by tutors as a modest form of action research in which, in *our* situation, with *our* students, and *our* comments, we sought data about the impact of comments on student learning and the student learning experience.

"...each week we kept *genuine* journals which mattered to us, and sent them to each other for comment – to be given just as the other gave comments to students. Eventually, we self-questioned and kept notes of the reactions which we had to the comments we received (see later for student reactions).

"We tutors all needed to develop our ability in a new mode of tutoring. That staff development is really the focus for this case study. So what did we do that counted as staff development? ...

"We needed at least someone (JC) who had engaged in this type of action research enquiry before; in point of fact, we had two such tutors." (Cowan)

This type of staff development is initiated and is under the control of the practitioner and can be used by an individual or a group. However, it does require some experience in using the technique. This approach to staff development is context dependent and the findings are not generalisable or transferable. It is particularly suitable for assisting staff in developing from competent to proficient practitioners (Figure 4.1).

Further details on action research can be found in the OTiS e-book Chapter 5: *Evaluation* (Harvey *et al*, 2001).

5.5.2 Reflective practice

Nurmela in her case study '*Online tutors with online training*' describes an online course which is designed as a course for teachers who will be tutoring students in a web based learning environment. In it she describes a form of action research based on experiential learning combined with self-reflection and self-evaluation.

“ [our] aim was also to build action theory for online tutoring based on participants’ own experiences during the course. Self-reflection and self-evaluation were the tools for building up this kind of action theory. Participants also saw reflections and evaluations from other participants in the form of online discussions and in the Final Report composed of participants’ self-evaluations...”

The aim of the course is to make the role and tasks of the tutor clear and concrete. The methods of the course were seen as more important than theoretical content of the course.

“The methods of the course were more important than theoretical content of the course. Participants were expected to have basic knowledge about tutoring before entering this course. They all had *studied Tutor Training for Open University Tutors* (3 study weeks) or were otherwise familiarised with tutoring in open and distance learning.”

The participants examined and recorded their feelings, attitudes and experiences over the duration of the course and reflect on the changes that occurred in each area and the reasons why they occurred:

“During the first week participants presented themselves and described their expectations with a given peer participant. This was a start for serious reflection that continued during the whole course. Participants were also asked to write their thoughts and reflections that arose during the course (a personal reflective log) ... Based on these notes and reflections participants wrote their self-evaluation in the end of the course. In the self-evaluation participants compared their experiences about learning and tutoring online to those expectations they had had at the beginning of the course. They also had to think how their attitude towards learning in web based learning environments had changed and how they saw their role and tasks as online tutors now. We also asked for feedback about this course and what should be changed. Based on these self-evaluations the two tutors collated a report, which contains good online tutoring practises. Of course these practises are suitable only within this context and tutors have to think things newly with different groups.”

Like action research (Section 5.5.1), reflection on practice is context dependent and is a continuous process. If staff are to become motivated lifelong learners they need to be reflective practitioners (Schon, 1983) an essential attribute if online tutors are to progress beyond being competent practitioners (Figure 4.1).

5.6 Developing the staff developers

An important issue which needs to be addressed, especially in institutions that are new to online learning is how the staff developers are to gain their experience and expertise. This is particularly important in institutions which are embracing online learning across the institution and there is no time to let expertise and best practice evolve.

Wishart describes a national initiative intended to address the lack of expertise in UK schools (Section 5.4.5). Two further case studies (Glass, and Murray) describe national initiatives in Australia to create experienced online tutors capable of developing the skills of other staff.

5.6.1 Professional development

Glass in her case study “*Professional development for VET teachers; preparing to teach online*” describes a national Australian initiative to deliver a professional development program for Vocation, Education and Training (VET) lecturers across Western Australia.

“The course is a broad based program designed to give VET lecturers the skills, knowledge and attitude to teach online.”

The aim of the course was to develop staff with the complete range of skills necessary to become effective online tutors including change management, training the trainers, mentoring and focus group techniques.

“...online training enabled participants to build specific skills and knowledge about the online environment (WebCT and Online Tutor Training). The online course also offered participants the opportunity to experience first hand what it is like to be an online student who is in another state from the online teacher. The course also addressed issues of change management, mentoring and focus group techniques in the face-to-face sessions.”

The intention was that these participants would return to their home institutions to support the local development of these skills. This aim was supported by the participants creating a shorter, online training course for VET lecturers in their own institutions:

“As part of the work-based learning approach taken, participants created a shorter 40 hour professional development program and delivered this program to other VET lecturers via a combination of face-to-face and online.”

As with our espoused best practice the approach was constructivist, collaborative and experiential:

“This approach posits that knowledge is actively built by learners, as opposed to instructivism that assumes an instructor who delivers knowledge and expects learners to receive and repeat it.”

The participants were expected to:

- “learn electronic distance education electronically at a distance,
- “work co-operatively over a distance,
- “discover the relationship between making constructivist connections and the ‘hyperlink’ nature of the Web environment.”

The primary aim of this long course, six months in length, was to create a large number of staff developers experienced in online learning and provided with the skills and training to enable them to act as C&IT champions and agents of change within their own institutions. This national initiative provided a self-sustaining and expanding pool of trainers who cascade the training locally within their own institutions. Staff development provision needs to be:

- realistic and sustainable,
- address a wide range of essential skills beyond online tutoring,
- flexible and adaptable.

5.6.2 Facilitating online staff development

Murray in her case study, “*Facilitating online staff development for novice online facilitators, trainers and assessors*”, describes the professional development of frontline managers, teachers and workplace trainers/assessors in the Vocational Education and Training (VET) sector in Tasmania. Their approach is two fold:

- providing a course for staff learning to design and facilitate online learning,
- setting up an Online Assessor and Workplace Trainer Network.

This approach addresses both the initial training needs of professional educators and a mechanism for ongoing support and development. Developing the tutors reflective skills was seen as an essential component of the provision and a key factor in its success and was supported by a special web site.

“In the *Reflection* site, we agreed on the type of reflection each group would undertake, eg with the group up front, ie public (for everyone to see) versus private (between tutor and student). Sometimes we agree that responses to a particular question will be private (ie, not distributed to all, but responded to on an individual basis). I collate all the responses and post them back to everyone the first time and then get each person in turn to take responsibility for that task, over a specific time-frame.”

Murray identified particular contextual issues which affect the online tutor’s ability to carry out the role effectively. These were support from senior managers and the need for ongoing and continuous practice to develop fluency and confidence in their skills. Staff development provision needs to:

- “have ... additional, second stage reflection, once participants are more confident in their newly acquired skills and knowledge,
- “improve managers’ understanding of participants’ support needs with further marketing and professional development for those managers.”

5.7 Professional communities of practice

Development for online tutors who wish to move beyond the competence stage in their development to become proficient or acknowledged experts (Figure 4.1) cannot be delivered by traditional staff development methods such as those described in previous sections. Most development opportunities beyond competency level come through sharing experiences with peers and participating in professional communities of practice. These development opportunities are generally self-initiated and the learning agenda is set by consensus. This section looks at two examples, one case study (Scheuermann *et al*) and the OTiS e-workshop.

5.7.1 International collaborative teaching and learning

Scheuermann *et al* in the case study “*Organising international collaborative teaching and learning in virtual learning environment*”, describe an international co-operation among Higher Education institutions in Austria, Germany, Sweden and Kazakhstan with inter-disciplinary starting points where students and professionals can meet to develop their skills and ideas.

“...a concept for course design based on inter-cultural and inter-disciplinary collaboration on both the instructors’ and students’ level has been developed and successfully applied...”

“Co-operative decisions are based on common educational and research interests, competence, persons in charge, technical resources and the cultural background.”

This three month online seminar addressed the specific theme of the connection between organisation, collaboration and learning in virtual learning environments (VLEs). The community of practice is wide and varied in its members incorporating the complete range from novice to expert.

“The learner profile of participants in the 1999 summer term *Online Seminar* are; two hundred and twenty-four students from forty-six different universities, nineteen academic specialities were represented from humanities to technology, eighty-eight participants held some form of employment, thirty-seven countries were represented, and the ages ranged from twenty to sixty-four.”

“Learning within the environment is structured to be multilevel and complex. Learners are learning from the team, but also from other learners. The team is learning from learners and other team members and participating institutions are learning from learners, teams and other institutions. These complex webs of different learning levels are intimately related to the collaboration taking place across all these levels. Meta-learning is built into the design. Feedback has shown that learners rate this collaboration structure highly.”

This online event was long, fairly formal and well structured, but catered for a range of participants all with different learning needs. The online interactions required organisation and facilitation although these facilitators were not necessarily taking the role of content expert or tutor. In summary, such events usually have:

- an mutually agreed focus and aims,
- a flexible structure which meets the needs of a range of participants and interests,
- expert facilitation.

5.7.2 The OTiS e-workshop

As the organisers of the OTiS e-workshop, we were experienced practitioners in online learning and teaching, positioning ourselves at the competent level in the stages of development framework (Figure 4.1). We had identified a need in Scottish higher education for a “forum to support staff developers in providing professional development for ICT to academics and pedagogic applications of ICT” (Alexander, 1999). In particular, “institutions also identified difficulties faced by teaching staff when adapting existing skills sets to becoming online facilitators and motivators and adapting their tutor style to this new medium.” (*ibid*)

In attempting to provide resources and training materials that would address this need, we identified three key questions:

1. How do we access the most recent thinking and experience in this rapidly changing field?
2. How can we convert this information into a reusable and flexible resource?
3. How can we use this resource to support staff in moving to support online learning, ie being an online tutor?

We decided to ‘consult’ our professional peers in attempting to answer these questions. In particular, we wanted to find out the most effective ways to establish the behaviour (skills, knowledge and attitudes) which is recurrent or routine in the day to day practice of

good/competent tutors. Often this knowledge is tacit (Schon, 1983) and largely implicit (Weick, 1995). We wanted to access the “practical consciousness” of competent practitioners (Giddens, 1976, 1979 and 1986) and make sense of it (Weick, 1995). We wanted to understand the way people work and tap into the “significant learning and innovation generated in the informal communities-of-practice in which they work” (Brown and Duguid, 1996). Brown and Duguid (*ibid*) suggest three ways to get to the heart of what practitioners actually do:

- Narration,
- Collaboration,
- Social construction.

This suggested a structure for an online, international workshop with a specific focus on online tutoring through which we could elicit current best practice in online tutoring from our peers. The mechanisms inspired by Brown and Duguid (1996) included:

- case studies (narration situated in context),
- online discussions/elaborations (collaboration),
- themes/writing teams (social construction).

Participants made explicit statements of their practice through submitting case studies. These formed the basis of discussions and collaborations during the e-workshop that aimed to construct a common and comprehensive understanding of effective practice in online tutoring. These experiences have subsequently been formalised into theory, exemplars, resources and guidelines captured in the OTiS online e-book. We achieved this through analysis and synthesis of the group’s experiences, knowledge and understanding. In some cases this was achieved by writing teams and in others by single authors.

The e-workshop was not a traditional course; there were no explicit roles of student or tutor. Each participant’s role evolved and changed as the workshop progressed depending on the topic, discussion or collaboration in which they were participating. Sometimes the expert, sometimes the learner. As the organisers we believe through the experience of organising and facilitating the e-workshop we moved from competent to proficient practitioners. In some small areas, through the interaction and participation with a wide range of experts we may even have become experts ourselves.

The specific structure, finite timescale and online access provided motivation and pacing balanced with flexible access and a time and location which suited the participants who came from around the world. Participation was voluntary and each participant was able to pursue topics which interested them and their own learning agenda. From our point of view, organising the event was a steep but productive learning curve which definitely supports an experiential learning approach. Similarly the process of synthesising the case studies, online discussions and chats promoted reflection and an in-depth understanding of the range of perspectives and approaches. Full details of the e-workshop schedule and resources area available online at <http://otis.scotcit.ac.uk>. The e-workshop provided:

- a specific focus with an agreed agenda and area of interest,
- a carefully planned structure to promote interaction and pacing,
- a variety of activities and stages to progress understanding and the development of knowledge,
- a range of specific and deliverable outputs.

5.8 Conclusion

Online learning demands that a wide range of academic and support staff develop new professional skills, form new collaborations and undertake new roles. Staff development is the key to developing good practice.

The provision needs to be flexible, to meet the needs of a wide range of individuals, and scalable, to meet the demands of large scale expansion into online learning.

Online tutors need a range of skills including technical competence, the ability to handle large amounts of information, collaborative and communication skills and team working skills. In particular, online tutors need a sound understanding of how people learn in an online environment. They need to understand what it means to teach online if they are not to transfer inappropriate face-to-face practices to this new environment. The staff development opportunities should be rooted in experiential learning and, where possible, be delivered using online methods. Other methods, such as face-to-face workshops and online resources, should be used where appropriate to meet specific needs or where it is inappropriate to use online methods of delivery.

Staff development requires an institutional approach which integrates central initiatives and support, eg providing the necessary networking infrastructure, with local support at individual, departmental and faculty/school level which motivates staff and addresses their specific needs. In particular, staff need time to develop and consolidate their new skills and embed them into their teaching practice. These changes need to be reflected in institutional policies, procedures and practices if they are to become habitual and long term.

6 Executive Summary

This chapter draws together the main themes and requirements of online tutoring and discusses how best staff development can support these needs.

Online learning offers new ways of learning and demands new ways of working from a wide range of staff. Their traditional roles are changing and evolving with new roles emerging and boundaries being redefined. Few individuals are likely to have, or be capable of developing, the full and complex combination of skills required and collaboration, co-operation and team working will be essential elements in any development. Each of these changes requires a different type of development and support, and new forms of staff development may be needed to meet the full range of these needs.

6.1 Institutional context

- Staff development must be fit for purpose and linked to institutional objectives. The staff development model must integrate an appropriate mix of central and local support; be responsive to the needs of individual staff; and be scalable to address the development need of large groups of staff.
- Institutions need to support the development of staff by removing barriers such as lack of time and appropriate training; and by motivating staff through recognising and rewarding innovation and excellence in online teaching.
- Evaluation can provide evidence as to the effectiveness of online learning; of good practice in staff development; and credibility for these new ways of working.
- Staff development must identify the range of staff needs and put in place an appropriate development process which will meet the technical, teaching and contextual knowledge and skills needed for online delivery.

6.2 Pedagogy vs technology

- Staff need a range of skills including IT skills; information handling expertise; educational and pedagogical skills; and management skills.
- Within the development process, staff developers must act as change agents, promoting, modelling and supporting the long term and sustainable changes needed to implement online learning.
- Staff need a reasonable level of technical skills sufficient to enable them to use the online learning environment effectively to support student learning.
- Staff need excellent information handling skills to cope with the vast range of new information and experiences they will encounter which are beyond their immediate role of online tutor.
- Staff need an understanding of the principles that underpin online learning. These pedagogical skills are the most important of the skills that an online tutor must have if they are not to transfer inappropriate practices into the online environment. Approaches to developing these skills must build on staff's existing knowledge and expertise if we are going to engage them in a supportive and open dialogue about online learning.
- Staff need to develop collaborative and communication skills which are essential to enable effective team working and which will enable them to adapt to an uncertain and changing environment.

6.3 Core components of staff development

- Developing expertise in the ‘craft’ knowledge of online tutoring takes time and staff development must support online tutors in different ways at different stages of this process. Frameworks for identifying the stages of development and of supporting the development of these skills are provided.
- Online experiential, collaborative learning as a student underpins this approach to developing staff skills as online tutors.
- Online methods should be used to deliver staff development for online tutors and, where appropriate, be combined with other more traditional methods such as workshops.
- An appropriate support infrastructure is essential to provide a safe environment in which staff can practice and develop their skills and which provides sources of help tailored to their individual needs.
- Mentors and peers support groups are flexible and scalable ways of supporting the development of staff skills.
- Online self-help resources such as guides, manuals and templates provide on-demand support which can be accessed as and when the staff require information or assistance from any location.

6.4 Examples of staff development models

- OTiS exemplars of staff develop have been categorised into one of seven categories: basic skills and awareness; competence and confidence; course design and delivery; recognition and accreditation; continuing professional development; developing the staff developers; and professional communities of practice.
- These categories can be used to identify and support the progress of staff through the stages of development as a online tutor from novice, through advanced beginner, competence, proficient to expert Figure 4.1, Section 4.1.

Appendix A References and Sources

A.1 Conference sources cited for this topic

References to OTiS Case Studies

The case studies quoted in this chapter are listed below and are published in

Higgison, Carol (ed) (2000) Practitioners' Experiences in Online Tutoring: Case Studies from the OTiS e-Workshop, May 2000, Heriot-Watt University and The Robert Gordon University, online at <http://otis.scotcit.ac.uk/casestudy/> (accessed 12 Feb 2001).

Anderson, Bill and Simpson, Mary (2000) Program-wide online group interaction: Developing a social infrastructure. Email: wga106@psu.edu and mgs174@psu.edu.

Bowskill, Nicholas (2000) Tutoring in real time environments.
Email: N.Bowskill@sheffield.ac.uk.

Cowan, John (2000) Personal development planning and self-reflection.
Email: John.Cowan@hw.ac.uk.

Creanor, Linda (2000) Structuring and animating online tutorials.
Email: l.creanor@gcal.ac.uk.

Daele, Amaury (2000) Tutoring collaborative groups at a distance. Email: amaury.daele@fundp.ac.be.

Doufexopoulou, Mairie (2000) e-Learning in Greece: A personal experience as student and tutor. Email Mariedf@central.ntua.gr.

Ehmann, Christa (2000) Training online tutors. Email: cehmann@smarthinking.com.

Ewing, Jim (2000) e-Learning is not always easy learning. Email: J.M.Ewing@norcol.ac.uk.

Finkelstein, David (2000) Utilising online learning in a humanities context.
Email: dfinkelstein@qmuc.ac.uk.

Glass, Melanie (2000) Professional development for VET teachers: Preparing to teach online.
Email melanie.glass@westone.wa.gov.au.

Hird, Anne (2000) Online teaching and learning in teacher education. Email: a_hird@ids.net.

Janes, Diane P (2000) Teaching online in a postgraduate certificate in technology based distributed learning. Email: Diane.janes@ubc.ca.

Juwah, Charles (2000) Developing effective online tutoring. Email c.juwah@rgu.ac.uk.

Kennedy, David and Duffy, Tim (2000) Understanding the effort.
Email: david.kennedy@paisley.ac.uk and tim.duffy@paisley.ac.uk.

Kulp, Rick (2000) IBM's "introduction to teaching in LearningSpace" course. Email: kulp@us.ibm.com.

Littlejohn, Allison (2000) An accredited module in web based teaching.
Email: allison.littlejohn@strath.ac.uk

Macdonald, Janet (2000) Integrating online tuition with assessment at the UK Open University. Email: jrm24@tutor.open.ac.uk.

McKenzie, Jane (2000a) Teaching through videoconferencing.
Email: JaneMcK@henleymc.ac.uk.

- McKenzie, Jane (2000b) Enriching content teaching through long term process based relationships for online learning support. Email: JaneMcK@henleymc.ac.uk.
- Mohamad, Fitri Suraya (2000) Guiding teachers in web based technologies.
- Kulp, Rick (2000) IBM's introduction to "Teaching in LearningSpace" course. Email: kulp@us.ibm.com.
- Morrison, Cathy (2000) T171: the pilot year experience, a tutor's perspective. Email: cathy@central-glasgow.ac.uk and cm349@tutor.open.ac.uk.
- Mottley, John (2000) Booting up the tutors: beginner workshops in online learning for fellow lecturers. Email: J.Mottley@uel.ac.uk.
- Murray, Josephine (2000) Facilitating online staff development for novice online facilitators, trainers and assessors. Email: jomurray@h130.aone.net.au.
- Newby-Fraser, Jenny and Clayton, John (2000) The Waikato Polytechnic Case Study. Email: esjnf@twp.ac.nz and esjfc@twp.ac.nz.
- Noakes, Nick (2000) Starting Small. Email: lcnoakes@ust.hk.
- Nurmela, Satu (2000) Online training for online tutors. Email: satu.nurmela@utu.fi.
- Pickering, Fred and Duggleby, Julia (2000) [Learning to teach online \(LeTTOL\)](#). Email: f.pickering@dial.pipex.com and julia.duggleby@sheffcol.ac.uk.
- Radic, Nebojsa (2000) Parliamento italiano: A computer mediated course of Italian language for beginners delivered at a distance. Email: N.radic@auckland.ac.nz.
- Salmon, Gilly (2000) Large scale distance training for effective moderation for management tutors. Email: G.K.Salmon@open.ac.uk.
- Salter, Graeme (2000) Modelling a constructivist approach to online learning. Email: g.salter@uws.edu.au.
- Scheuermann, Friedrich, Larsson, Ken and Toto, Roxanne (2000) Organising international collaborative teaching and learning in virtual learning environments. Email: friedrich.Scheuermann@uibk.ac.at, kenlars@dsv.su.se and rytl@psu.edu.
- Sharpe, Rhona and Baume, David (2000) Online tutoring for teaching and course design in higher education. Email: r.sharpe@open.ac.uk.
- Street, Deborah (2000) Developing professional and IT skills online. Email: deborah.street@uwe.ac.uk.
- Thompson, Ray and Rosie, Anthony (2000) Collaborative development of online courses: Which is the tutor and which the taught?. Email: r.c.thompson@shu.ac.uk and A.J.Rosie@shu.ac.uk.
- White, Nancy and Moussou, Mihaela (2000) Facilitating interaction in an online environment. Email: nancyw@fullcirc.com.
- Whittington, Dave and Dewar, Tammy (2000) Type indicators and online learners. Email: d.whittington@elec.ga.ac.uk.
- Wishart, Jocelyn (2000) Online delivery of ICT in UK schools. Email: j.m.wishart@lboro.ac.uk.

References to OTiS Discussions

Authors of discussion contributions quoted in this chapter are listed below. The online discussions are available on the Virtual Learning Space at <http://itlearningspace-scot.ac.uk> in the Community area.

- Banks, S (2000a) 10 May 2000 Subject: none. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Banks, S (2000b) 10 May 2000 Subject: none. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Banks, S (2000c) 10 May 2000 Subject: none. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Banks, S (2000d) 11 May 2000 Subject: Incentives. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Banks, S (2000e) 10 May 2000 Subject: none. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Blom, D (2000) 11 May 2000 Subject: traditional tutor models. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Gilbert–Hunt (2000a) 11 May 2000 Subject: none. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Glass, M. (2000a) 11 May 2000 Subject: Characteristics for online teachers. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Glass, M. (2000b) 12 May 2000 Subject: Mentoring. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Glass, M. (2000c) 24 July 2000 Subject: Three interesting questions. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Gunn, C. (2000a) 10 May 2000 Subject: Kicking off. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Gunn, C. (2000b) 10 May 2000 Subject: Evaluating tutor training. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Janes, D (2000a) 12 May 2000 Subject: using mentors..... Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Janes, D (2000b) 12 May 2000 Subject: Characteristics for online teachers. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Noakes, N. (2000) 11 May 2000 Subject: Questions. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Steeple, C. (2000a) 10 May 2000 Subject: Incentives for Tutors. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Steeple, C. (2000b) 11 May 2000 Subject: Selecting online tutors. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).
- Spratt, C. (2000) 11 May 2000 Subject: Staff Development. Discussion Room: OTiS – Staff Development (1) (accessed 12 Feb 2001).

A.2 External references

- Alexander, W (1999) TALiSMAN Review of Staff Development Courses and Materials for C&IT in Teaching, Learning and Assessment, available online at <http://www.talisman.hw.ac.uk/CITreview> (accessed 20 August 2001)
- Bartolic-Zlomislic, S and Bates, AW (1999) Investing in online learning: Potential benefits and limitations in the *Canadian Journal of Communications*, 24 (3). (Journal available online at <http://www.cjc-online.ca/> accessed 20 Nov 2000).
- Berliner, D (1988) The development of expertise in pedagogy. Paper presented at the Annual Meeting of the American Association of Colleges for Teacher Education, New Orleans.
- Bottomley, J, Spratt, C, and Rice, M, (1999) Strategies for effecting strategic organisational change in teaching practices: Case studies at Deakin University, in *Interactive Learning Environments*, Vol 7, No 2-3.
- Core, J and Wiles, K (2001) Four Weddings and a Funeral: marrying teachers to C&IT. Paper presented at the SEDA Conference – "Challenge to Change: Enhancing the Practice and Scholarship of Learning and Teaching", April 2001, Glasgow, UK. Abstract available online at <http://www.seda.demon.co.uk/glas01/core.htm> (accessed 12 September 2001).
- Cornelius, S (2001) Learning Online: Models and Styles in Higgison, C (ed) *The Online Tutoring e-Book*, The Online Tutoring Skills Project, Heriot-Watt University and The Robert Gordon University. Available online at <http://otis.scotcit.ac.uk/onlinebook/>.
- Cornelius, S and Higgison, C (2001) The Tutor's Role and Effective Strategies for Online Tutoring in Higgison, C (ed) *The Online Tutoring e-Book*, The Online Tutoring Skills Project, Heriot-Watt University and The Robert Gordon University. Available online at <http://otis.scotcit.ac.uk/onlinebook/>.
- Ellis, A, O'Reilly, M, and Debreceny, R (1998) Staff Development Responses to the Demand for Online Learning and Teaching. Proceedings of the 15th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE): pp191-201. University of Wollongong: The Printery.
- Fowler, S, and Dickie, B (1997) Making a Difference: Equipping Teachers for Curriculum Change, (Report No. 2), Commonwealth Department of Employment, Education, Training and Youth Affairs.
- Freeman, M (1997) Flexibility in access, interaction and assessment: the case for web based teaching programs in the *Australian Journal of Educational Technology*, 13(1), 23-39.
- Hall, G and Hord, S (1987) Change in Schools: Facilitating the Process, State University of New York Press, Albany.
- Harvey, J, Higgison, C and Gunn, C (2001) Evaluation in Higgison, C (ed) *The Online Tutoring e-Book*, The Online Tutoring Skills Project, Heriot-Watt University and The Robert Gordon University. Available online at <http://otis.scotcit.ac.uk/onlinebook/>.
- Higgison, Carol (ed) (2000) Practitioners' Experiences in Online Tutoring: Case Studies from the OTiS e-Workshop, May 2000, Heriot-Watt University and The Robert Gordon University, [online]. Available at <http://otis.scotcit.ac.uk/casestudy/> (accessed 12 Feb 2001).
- Higgison, Carol (ed) (2000-1) Online Tutoring Skills e-book, Heriot-Watt University and The Robert Gordon University, [online]. Available at <http://otis.scotcit.ac.uk/onlinebook/> (accessed 27 November 2001).
- Labour, M, Juwah, C, White, N and Tolley, S (2001) Culture and Ethics: Facilitating Online Learning in Higgison, C (ed) *The Online Tutoring e-Book*, The Online Tutoring Skills

- Project, Heriot-Watt University and The Robert Gordon University. Available online at <http://otis.scotcit.ac.uk/onlinebook/>.
- Levy, P (1997) Continuing professional development for networked learning support: progress review of research and curriculum design, Sheffield. Paper delivered at the 2nd International Symposium of Networked Learner Support, June 1997, Sheffield, England. Available online at <http://www.shef.ac.uk/~is/publications/infres/paper35.html> (accessed 15 February 2001).
- Loucks-Horsley, S, Hewson, P, Love, N and Stiles, K (1998) *Designing Professional Development for Teachers of Science and Mathematics*, Thousand Oaks: Corwin Press.
- McAlpine, M and Higgison, C (2001) New Assessment Methods in Higgison, C (ed) *The Online Tutoring e-Book*, The Online Tutoring Skills Project, Heriot-Watt University and The Robert Gordon University. Available online at <http://otis.scotcit.ac.uk/onlinebook/>.
- Steeple, C, Goodyear, P, Tickner, S (2000) Online tutoring: skills and actions for distance educators in HE. Paper presented at the Technology in Teaching and Learning in Higher Education international conference, August 25-27, 2000, Samos Island, Greece. Available online at <http://csalt.lancs.ac.uk/jisc/resources.htm> or <http://csalt.lancs.ac.uk/SAMOS2000.ppt> (accessed 12 September 2001).
- Schon, D (1983) *The reflective practitioner: How professionals think in action*, Temple Smith, London.
- Spratt, C, Palmer, S and Coldwell, J (2000) Using Technologies in Teaching: an initiative in academic staff development in *Educational Technology and Society*, 3(3) June 2000 [online] available at http://ifets.ieee.org/periodical/vol_3_2000/v_3_2000.html (accessed 12 September 2001).
- Templeton, E (2001) Institutional Support in Higgison, C (ed) *The Online Tutoring e-Book*, The Online Tutoring Skills Project, Heriot-Watt University and The Robert Gordon University. Available online at <http://otis.scotcit.ac.uk/onlinebook/>.
- Wills, S, Nouwens, F, Dixon, S, and Lefoe, G (1997) *Teaching at a Distance about Teaching at a Distance: a Resource for Staff Development*. Proceedings of the 14th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE). Curtin University of Technology: Academic Computing Services.
- Zimmer, B, Harris, R, and Muirhead, B (2001) Building and Online Community in Higgison, C (ed) *The Online Tutoring e-Book*, The Online Tutoring Skills Project, Heriot-Watt University and The Robert Gordon University. Available online at <http://otis.scotcit.ac.uk/onlinebook/>.

A.3 Author details

Carol Higgison was based at the Institute for Computer Based Learning at Heriot-Watt University in Edinburgh where she advised staff on the use of information and communication technologies (ICT) for learning, teaching and research. Carol was project manager of the Online Tutoring Skills project (OTiS), in partnership with the Robert Gordon University, and is co-author and editor of the OTiS e-Workshop publications. Carol is an online tutor for Open University, teaching on the MA in Open and Distance Learning. Previously Carol co-ordinated a national staff development programme to support the effective application of ICT in higher education. Carol is now an Adviser on Academic Quality Enhancement (ICT) at the University of Bradford.