

Online Tutoring e-Book

Editor Carol Higgison



Chapter 7 Institutional Support

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Preface

Institutional support emerged as a key factor in determining the success of online learning initiatives. The OTIS e-Workshop¹ case studies identify many areas where institutional support is essential and the OTIS online community began the process of establishing guidelines for supporting institutions and staff migrating from existing tutoring models to an appropriate online counterpart.

This chapter reviews the role of institutional support in online tutoring, identifies the areas where it is required, and offers examples of current practice where it can be seen that effective institutional support is encouraging the growth of online tutoring. We believe that a clearer understanding of the role the institution can play in supporting online tutors will assist those institutions already engaging with online learning and help those considering developing online courses.

Emma Templeton, the author of this chapter, is a member of the OTiS project team and the resource librarian.

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.

My sincere thanks to all the participants and, in particular, the authors whose commitment extended long beyond the end of the e-workshop.

Carol Higgison (editor)

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¹ The OTiS International e-Workshop on Developing Online Tutoring Skills was held between 8–12 May 2000. It was organised by Heriot-Watt University, Edinburgh and The Robert Gordon University, Aberdeen, UK.

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7 Institutional Support



Emma Templeton

1 Introduction

Ruth Dunkin, in her keynote address to the OTiS e-workshop, highlighted the importance of institutional support in the development of online tutoring and learning:

"...the institution in supporting the academic to adopt online communication media must review all of its operating procedures and structures to ensure that the support is holistic for 'without such change, the academic who seeks to embrace the online educational world is left stranded' and the online learner will not receive an 'effective service delivery ...' (Dunkin, 2000)

The aim of this chapter is to examine the role of institutional support in online tutoring, to identify areas where this support is required and to offer examples of current practice where it can be seen that institutional support is encouraging the growth of online tutoring and learning. Throughout, a wide range of contributions from the e-workshop illustrate the many ways institutional support can affect the development of online tutoring and learning and why it is important to have a knowledge and understanding of these approaches and their influences.

References given without dates are references to conference case study contributions. References designated by the letter 'D' and with dates are references to conference discussion group contributions. Details for both of these are given in Appendix A.

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

2 Institutional Support

This section examines some of the issues and barriers an institution must address in order to effectively support its online learning initiatives.

2.1 Why is it needed?

A variety of reasons emerge from the case studies as to why educational institutions and commercial organisations are venturing into online learning.

• A wish to exploit the potential of new global markets in distance education and niche subject expertise:

Examples can be found in Janes, Higgison, Webster, Neal, Ehmann, Roberts, and McFarlane.

• A strategic commitment to provide relevant, flexible and accessible learning opportunities:

"The ... polytechnic strategic plan identifies a number of reasons for the development of mixed mode delivery including, cost, reducing barriers to learning created by geographical location, improving the quality of existing programmes and provide a choice of learning environment for students." (Newby-Fraser and Clayton)

"The mission statement of the University ... includes a commitment to provide 'vocationally orientated higher education' and to do so by means of 'flexible and accessible modular programmes ... based on imaginative modes of delivery, on and off campus." (Kennedy and Duffy)

• Providing cost effective and accessible continuous professional development opportunities:

"The potential of the Internet for delivering cost-effective and more accessible professional training is widely accepted...Our aim is to deliver current, innovative and best practice-oriented training material in a costeffective and accessible manner. Delivering this ...online was essential to create a viable model of mass CPD." (Webster)

• A method of coping with increasing numbers of students studying on distributed campuses and at a distance:

"The School... was trying to cope with the continual increase in student numbers. From being a newly formed school a few short years ago, SITACS has rapidly expanded. This increase was evidenced in the expansion of [*the*] University ... to its new campus ... and the expansion of SITACS courses into Singapore and Malaysia. A method was needed to effectively communicate course material to students, keep that information secure and facilitate student communication with the lecturer." (McFarlane)

• A way of maintaining quality while addressing the challenge of increasing pressure on staff time and budgets:

"There was also a need to ensure quality control at our offshore partners, and staff could not be spared to teach the small group at the newly established ... campus." (McFarlane) "...professionals are under pressure to meet demanding work objectives even as they must stay current on business and technical issues. They are distributed around the world, often working from home or from a customer location, and have neither time nor travel budget to attend classroom training more than occasionally ...[*and are*] turning increasingly to online learning." (Kulp)

Institutions perceive that communication and information technologies will allow them to attract and support greater numbers of students, on campus and at a distance, by offering them more flexible and accessible learning opportunities at an affordable cost while attracting increased revenues. Such major changes in delivery strategies and methods require to be supported and addressed by the institution at a senior level.

2.2 What is it?

An institution must consider the support required by both staff and students to make the online learning experience an effective, productive and enjoyable one.

"Effective and efficient delivery of instruction in a higher education setting must consider the whole context and process from course development, organisation, delivery and evaluation." (Scheuermann *et al*)

The types of institutional support needed for online learning will be similar to those provided for more traditional forms of learning, eg: administration, finance, learning support, guidance and counselling, learning/library resources and so on. However, trying to use existing support services can prove problematic, as Morrison notes:

"The main problems with this course arose where it interfaced with preexisting university systems and services." (Morrison)

Adapting existing support systems to meet the demands of online learning is a major challenge that needs to be addressed by institutions. What will change are the form and delivery mechanisms of support, the addition of new areas of support such as technology and the revision of policies and procedures to accommodate the new methods of student attendance, learning and assessment. The current trend appears to be towards an integrated system, which supports teaching, learning, administration and management:

"...[*it*] builds on the premise that the Web medium can allow a seamless integration of both an institution's teaching and the institution's administration functions. This integration can then provide an infrastructure for effective online and flexible delivery teaching modes." (Salter)

However, the level and type of the support will depend on the nature and extent of the online learning activity. The nature of the support will also depend on the institutional culture, the principles and assumptions that underlie the educational philosophy of the institution and its operating processes, and how these affect the development of online tutoring and online learning.

2.3 Institutional culture

An institution's culture relates to the way in which it operates and the assumptions which underpin it. According to Dunkin (2000) many institutions and those working for them simply see the shift to online delivery as "adding to the institution greater flexibility in its modes of delivery, or learning". In reality it is much more than this and fundamental shifts in operating procedures and assumptions are required to make online delivery a success.

"I take a broad view of integration in the sense that the institutional culture needs to support innovation as well as academic practice." (Gunn-D 2000a)

There was some concern expressed that educational institutions, particularly Universities, are unable to make these fundamental shifts and unable to respond to the rapid changes demanded by online learning.

"...we are struggling to keep up with the pace of development for online learning. Policies and accepted practices don't change fast enough." (Gunn-D 2000b)

"Universities are still conservative bureaucratic organisations. Online technologies demand that we are able to work and think differently and more creatively. The nature of the University often precludes this." (Spratt-D 2000a)

A second concern is that institutions espouse an ideology of flexible learning that they are unwilling to support with the necessary resources:

"What interests me though is as you suggest, that the rhetoric of flexibility and online learning has rapidly become ideological. Universities are cumbersome beasts. Academics are often burdened with listening to the ideology of the institution which is often not backed up with resourcing..." (Spratt-D 2000c)

"Like any good course, this demands effort and resources." (Kennedy and Duffy)

The e-workshop participants identified a number of issues and assumptions that underlie these perspectives and these are explored in the next section.

2.4 General Issues

Two issues which are key to the successful implementation of online learning are the need to have a clear understanding of the processes and change involved in adopting online learning, and gaining institutional support to implement these changes.

2.4.1 Getting institutional support

Many of the e-workshop participants recognise the difficulties associated with obtaining institutional support for online learning innovations, for example Kennedy and Duffy:

"There are unrealistic notions about the effort involved in developing materials, course programmes, support mechanisms and effective learning, also about the cost effectiveness of distance learning."

and they distinguish between:

"the nature of the institutional readiness (as distinct from management eagerness)".

So whilst management, academics, technology support staff, learning support staff and administrative staff may be seen to be eager to support the migration from existing tutoring models to the appropriate online counterpart there is no clear understanding of what exactly is involved at an institutional level to support such a migration.

"While there has been significant increase in Faculty commitment to and use of online technologies, the central University administration support services are way behind. There are many reasons for this not least in my view is the huge gap that exists between what goes on a day-to-day level in Faculties and what central services think they know about it and their often deeply misguided ideas about how they (administration) can or should support academic work." (Spratt-D 2000a)

In the UK, the Joint Information Services Committee (<u>http://www.jisc.ac.uk</u>) is funding a number of exploratory studies, which aim to develop a clearer understanding of what is involved in this migration. Two examples are:

- Networked Learning in Higher Education which explored the student experience of networked learning available online at http://csalt.lancs.ac.uk/jisc/.
- LNCS Learning Networks: Communication Skills project which examined the characteristics of current conferencing technologies and the communication skills required for their educational use – available online at <u>http://www.gla.ac.uk/lncs/index.htm</u>.

2.4.2 Understanding the process

Over simplifying the process of adopting online learning programmes by an institution will create problems in support and there is a real danger of the institution failing in its online learning objectives if this occurs.

As Dunkin comments:

"... some portray the implementation of online delivery as merely adding to the institution greater flexibility in its modes of delivery, or learning, it is in fact significantly more than this. It requires all members of the institutional community to re-examine the principles and assumptions that underlie their operating processes." (Dunkin, 2000).

Noakes outlines a typical scenario of an institution rushing into online leaning without due thought or planning:

"In my own context ... there is a lot of pressure and money to 'go digital' from the government but at an institutional level I have yet to see the formation of cross-functional teams. Academic departments and even the Centre for Enhanced Teaching and Learning seem to forge ahead without involving key service units such as computer services, the library, student affairs and student administration (our dial-in infrastructure isn't there even with minimal use now!)." (Noakes-D 2000a)

However, problems also arise in using existing institutional services to support online students and this can create additional work for the tutors as Janes describes:

"Initially... [we] tried to use facilities and services of the University (such as registration, the bookstore) to administer the program. It was found that institutional policies were designed to work for the traditional on campus student ... [We] took over the administration of several of these services and tutors were sometimes asked to advocate for the participant with the University or other agencies." (Janes)

Kennedy and Duffy illustrate what is needed for support to be effective:

"The key supportive ingredient is the presence of a collaborative team. That comprises an administrator, programme co-ordinator/director, distance learning writers, technical support staff, librarians and academics. Both the teachers and the participants need that foundation. All need each other." (Kennedy and Duffy) Radic also agrees with this approach:

"Good online teaching requires from the tutor/moderator sound 'understanding' of this specific, newly created environment. The same is true for institutions." (Radic)

The e-workshop participants suggest that one of the most crucial factors in achieving success in an online environment is to have the support of both the institution and those involved in its operational processes. Some of what is required at an institutional level in terms of support to make the online learning environment a success is introduced in the next section.

Issues which are relevant but which are not covered in this chapter include the need to develop integrated institutional strategies for information, learning and teaching, and information and communications technologies. Key topics, which these strategies should address, include infrastructure, authentication and network security, copyright and intellectual property rights, data protection, sustainability and integration, and costing models.

3 Institutional Level Support Issues

As mentioned in the previous section, a real danger to the success of online learning is the oversimplification by the institution of what is involved in the implementation of online learning initiatives. This section identifies and illustrates the institutional level issues that are related to supporting online learning.

3.1 Level of support

Online learning innovations can be introduced at a number of levels from small-scale individual projects to institution wide initiatives. Implementations can be:

- by an individual member of staff (eg Doufexopoulou),
- to support a specific module (eg Ballantyne, Cowan, Gwynne and Chester, Ewing, Finkelstein, Morrison, Phillips, Radic, Sitharam and Shimizu, Rosie and Thomson, Sharpe and Baume, Tammelin, Webster),
- across a course programme (eg Anderson and Simpson, Creanor, Gilbert-Hunt and McLaine, Janes, Kennedy and Duffy),
- across a department, school or faculty (eg McFarlane, McKenzie, Roberts, Street),
- institution wide (eg Blom, Macdonald, Salter, White and Moussou),
- external to the institution (eg Ehmann).

(The examples above do not include case studies that describe innovations supported by one-off external funding or staff development and training to support online learning.)

Support services and procedures must be flexible enough to support a range of innovations while still maintaining a consistent and reliable quality of service.

3.2 Assumptions and challenges

Successful delivery of online learning requires a fundamental shift in institutions' operating procedures. Established institutional policies, procedures and practices must adapt and change to meet the needs of online learning. Often this process of change requires that institutions challenge the assumptions and beliefs that underlie their existing practices.

Participants in the e-workshop identified a number of areas that require careful examination. These include: defining the true costs and effort involved in developing and delivering online learning, establishing online teaching as a visible and valid activity, and identifying and challenging resistance to change.

3.2.1 Costs and effort

A key issue identified by e-workshop participants is the:

"...unrealistic notions about the effort involved in developing materials, course programmes, support mechanisms and effective learning." (Kennedy and Duffy).

As Morrison notes:

"Management often see online tuition as a way of cutting costs and don't recognise the hidden subsidy of the tutors' own time being used." (Morrison-D 2000a)

Creanor highlights the need for management to acknowledge the true costs of online learning and the unsustainability of relying on the goodwill of staff:

"University management should be made aware of the additional time required to set up online courses, create or adapt materials and facilitate conferences. Depending on the goodwill of tutors to use up more of their own time is not a long-term option." (Creanor)

Institutions cannot thus see online delivery as a cheap alternative to traditional on-site delivery of programmes, it is essential that they are:

"... realistic about the time involved and the intensive nature of the communication between teacher and students in supported distance learning." (Kennedy and Duffy).

Many case studies reflect the view that online learning is not a cheap option (when compared to traditional forms of teaching) in terms of development costs, running costs or staff time. However none suggest a clear and reliable method of calculating the true costs of implementing online learning.

A recent study – *The Costs of Networked Learning* (Bacsich *et al*, 1999) (online at <u>http://www.shu.ac.uk/virtual_campus/cnl/index.htm</u>) – funded by the UK Joint Information Services Committee (JISC), aimed to examine and identify the hidden costs of networked learning. It identified a number of projects and reports that attempt to cost the development and deliver online learning and can be found at <u>http://www.shu.ac.uk/virtual_campus/cnl/links/index.htm</u>. Phase II of the project aims to take the theoretical framework arrived at during the first phase and develop it into a practical handbook.

3.2.2 Perceptions and workload

In some cases studies there is an underlying assumption, and hence fear by those involved in online programmes, that colleagues and the institution perceive them as not working or pulling their weight.

This dilemma is clearly described by Hird:

"A nagging question for me is: how does anyone know I am working if my work doesn't look like anyone else's? In an environment in which workloads are measured in terms of course credits and hours spent in a physical classroom, it is difficult even for me to track the amount of time that goes into an online course. The time I spend constructing and checking into each of my course web sites several times daily is difficult to translate into course credit hours. Also, since I can do my online teaching anywhere I have web access, my work is frequently invisible to colleagues." (Hird)

"It is very easy for colleagues and administrators to see that you are NOT lecturing for the same amount of time that they are. But it is much more difficult for them to recognize the many hours spent online as comparable 'work'." (Hird-D 2000a)

Administrative staff and managers often share this perception. Success in online course delivery will come when the institution sees 'contact hours' as not necessarily meaning the number of hours a teacher physically spends in a classroom.

Some institutions are attempting to address this problem but as McKenzie (D 2000a) points out such a system can be difficult to manage:

"We do now have a system for giving credit for online teaching hours, but of course it's actually very difficult to manage, particularly when the tutor role is changing, and it may be a question of NOT intervening and so demonstrating activity, even though the tutor has spent a lot of time reading and reflecting on how to respond to the content. Reflection time is not something one normally has in f2f [*face-to-face*] class situations. Effectively, at the extreme, this could mean the learning outcomes are better from online, because the tutor has time to contemplate the best response, but there is little evidence of tutor activity :-) That's a pig of a paradox when you are trying to manage tutor productivity!" (McKenzie-D 2000a)

A change in thinking is thus required by staff at both an individual and collective level because they are being asked to redefine what they do and how they do it. Many may be resistant to such change.

3.2.3 Resistance to change

Staff resistance to online learning must be identified early and the causes clearly established and successfully challenged at all levels if the change is to be successful. Resistance may be due to a variety of causes:

• Lack of recognition of effort or work involved:

"I have colleagues who won't use online because they fear the additional costs when it is just credited hours that count. " (Rosie-D 2000)

• Lack of incentives:

"University and college management are encouraging staff to develop web skills, but in most cases it seems they are not backing it up with any real incentives or even allowing any extra time for transforming courses or gaining tutoring skills. If it means a greater workload with no obvious reward, why should staff make the effort?" (Creanor-D 2000a)

• Lack of adequate support, particularly for staff new to online learning.

"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 one hundred and eighty to four hundred hours in the same thirteen week period." (Janes)

• Fear of the unknown and fear of change.

Staff need to be reassured that "the skills they already possess in small group teaching and personal support of learners are the foundation for their successful participation" (Kennedy and Duffy) in online programmes.

Overcoming resistance

Newby-Fraser and Clayton describe the approach adopted by Waikato Polytechnic, New Zealand to encourage academic support for online learning. This institution introduced an incentive or recognition scheme known as the Educational Technology Award to ensure that those involved in online delivery and innovative practice received recognition for their work (Newby-Fraser and Clayton).

Incentives and reward schemes may also tip the balance in favour of participation for those that may well have been interested in online teaching but were daunted by the greater workload it involves.

In addition to the academic/lecturer/tutor, the institutions must also actively support the other members of staff "who supply communication and network facilities, access to information resources, student counselling, building facilities or financial or human resources services" (Dunkin, 2000). The institution must re-evaluate their contribution and decide upon how best to reflect their value in the development of a successful online delivery.

The views of many e-workshop participants is summed up by Dunkin when she states that:

"[*if*] the assumptions about the organisation's mission and main ways of pursuing that mission remain unaddressed and therefore unaltered, any change program designed to vary the way in which the organization goes about its business will fail to achieve its goals." (Dunkin, 2000)

3.3 Operational procedures

Implementation of online delivery can fail because institutional procedures have not been adapted to meet the changing needs of an online environment or because those involved in operating procedures, (teaching and support) refuse to implement necessary changes because this would differ from how they operate traditionally.

An example from Janes illustrates some of the difficulties that can arise:

"We are in negotiation with the University to adapt the registration procedures to our needs. In the meantime, we continue to have a mirror registration system. UBC is a traditional face-to-face institution with some support for traditional distance education. This project makes different demands of the system at the graduate level. For example, our telephone registration system will not register graduate students in distance courses. No one at the time of programming believed that any graduate work would be done by distance, hence we have to wait until they upgrade the system, before students can register for distance as they would class based courses." (Janes)

The demands on online tutors are often perceived to be greater, partly because the relative invisibility of other support services and the challenge presented by the technology:

"The demands on online tutors are much greater ... partly because ... in face-to-face environments ... course administrators, and other staff, are more accessible, and partly because of the technology issue." (McKenzie-D 2000b)

Instead of spending time actually supporting student-learning needs many tutors are often stuck playing an intermediary role between the student and central university administration support services. For example, the online tutor may become involved in supporting their online students in enrolling and other central administrative tasks. As Radic describes, the last barrier they are trying to overcome is "the old fashioned enrolment procedure that cannot cope with the needs of students at a distance and the administration that does not understand the issues involved in the course delivery" (Radic).

Most central administrative procedures within institutions have been set up to meet the needs of the full-time student who attend campus on a regular basis. However, with the advent of online learning it is no longer the case that the student can attend to administrative issues during traditional business hours that universities have conformed to

in the past and reassessment is required for such processes to meet the needs of online learners, for example:

"... one of the ways in which its history as a distance education provider has helped ... to come to grips with the thrust of online learning is ... a reasonable IT infrastructure and ... a history of course team development..." (Spratt-D 2000c)

Some participants of the e-workshop felt that central support services often had "deeply misguided ideas about how they (administration) can or should support academic work" (Spratt-D 2000a) and that the nature of online environments and the need for online learners to engage with the institution in different ways "requires that these institutional processes are redesigned" for effective service delivery to occur (Dunkin, 2000).

The support services provided for online learners need to be clearly signposted and easily accessible to students through a variety of routes, including: email, the Web, fax and telephone.

3.4 Technology

A robust, reliable and accessible IT and communications infrastructure is an essential prerequisite to the successful implementation of online learning:

"To ensure that the introduction of information and communication technologies in educational institutions is neither haphazard nor left to chance a technological strategy should be developed. However, we are all aware that what is important is not what is written but what is done." (Newby-Fraser and Clayton)

Technical support for online teaching and learning involves developing appropriate IT infrastructures and technical support services for staff and students. This has to be set at an institutional level and some sort of project management is required to coordinate the development of this IT infrastructure and the inputs of various support departments.

As identified by Roberts:

"The most pressing current need is for the integration of online course management, student registration and assessment with existing University administration systems. The proliferation of different registration and login procedures adds to student confusion. An ideal system would control everything from enrolment and payment of fees, though instruction, collaboration, assessment, and finally to publication of results." (Roberts)

Roberts identifies three main areas of support were identified in relation to IT and technical support issues:

- support of staff and students in installation and use of the software,
- support of tutors in new teaching techniques,
- technical support for registrations, logins and server maintenance.

Decisions about hardware infrastructure, software platforms and applications and technical support services all need to be considered.

Recommendations from e-workshop participants include:

• investing appropriately in high-capacity servers to provide a stable and reliable service (Salter),

- providing redundant server/services to support time-critical applications such as synchronous communications (Roberts),
- extensive testing before launching online services, using different types of hardware and browsers from various locations (Rotherham),
- technical support for downloading, installing and using the software, firewall problems and remote access issues (Glass).

There were many different approaches to the choice of an online learning environment including:

- selecting proven and supported proprietary software (eg Ewing, Finkelstein, Sharpe and Baume),
- exploiting the accessible and familiar web (eg Clark, Sharpe and Baume),
- developing bespoke environments in-house (eg Ewing, Scheuermann *et al*).

Each choice has its own implications for the level and cost of technical support and help services required for course development and implementation and ongoing support for staff and students. The case studies cover a wide variety of online learning environments and the details for each case study are described in its abstract.

Further issues relating to the IT support required by staff and students will be discussed later on in this chapter.

3.5 Senior management and policy development

OTiS e-Workshop participants formed the opinion that moves by institutions to online teaching and learning stood more chance of succeeding where there was a shared vision and they were supported by people in senior management:

"...we believe the critical success factor was a shared vision of how we wanted online learning to develop." (Pickering and Duggleby)

"Commitment to the programme and its implementation by key decision makers ... has been essential from the outset. Links to external stakeholders ...have been developed to ensure a wide base of support for the programme." (Anderson and Simpson)

Flexible, technology based programs and courses require significant organisational and cultural change. It needs:

"... management action at several levels to put in place new structures, policies and processes". (Bottomley *et al*, 1999)

However, the action of management is only successful "if accompanied by changed beliefs, attitudes, and behaviours of academic staff" but it can certainly encourage participation in online tutoring if for example there is a "university wide staff development strategy which focuses on embedding effective use of C&IT in delivering teaching and supporting learning and appropriate skills development." (Juwah)

3.5.1 Developing policy

A further issue identified in relation to senior management support is that of their influence on deciding institutional policy. Debate amongst e-workshop participants related to whether those in senior management should be putting in place institutional policy on online courses if they have little or no online teaching and learning experience.

As Hird points out "policy regarding online courses may help to ensure the integrity of courses, but [it] can also be a barrier", especially if people with relevant experience are not consulted by senior management when developing it. The danger there then is that "policy for traditional face-to-face courses will simply be carried over, which only reinforces old ways of teaching rather than encouraging faculty to explore the full potential of the new content". (Hird-D 2000b)

Some participants reported support services being set up by department and faculties independently of central facilities (eg Janes). Spratt (D-2000a) describes such a development at Deakin University in Australia:

"Some Schools at Deakin by-pass central admin for assignment submission for off campus students because they have their own IT capability... Some Schools and Faculties recognise the need to be more reactive and have set up their own services when central services can't meet their needs." (Spratt-D 2000a)

She goes onto acknowledge the lack of sustainability of such an approach:

I think too there is a grave risk of complete devolution of services to Faculties. ...I am certain that some Faculty schools or departments would find it impossible to sustain the kind of IT infrastructure that is needed to support good online teaching." (Spratt-D 2000b)

Institutional policy should not constrain the development of online teaching or learning but should nurture and direct and provide the freedom and flexibility for staff to take "full advantage of the new learning environment". (Hird-D 2000b)

3.5.2 Assessment as a policy issue

Online assessment strategies and methods present particular challenges when it comes to policy development and is a particular issue where the online learning is accredited:

"Policies and accepted practices don't change fast enough. For example, our first entirely online course hit a wall when the institutional assessment policy didn't allow the 'less conventional' type of assessment that reflected learning objectives for the course. It takes at least a year to get through a policy amendment process." (Gunn-D 2000b)

Flexibility in assessment can also be constrained by external factors as noted by Creanor:

"We have introduced a bit more flexibility, but we are by necessity restricted by formal structures such as assessment board meetings and external examiners' deadlines for receiving assignments." (Creanor-D 2000b)

Support for assessment is discussed further under Tutor and Student support and Assessment strategies and methods are discussed in more depth in Chapter 4 *New Assessment Methods*.

3.6 Staff development

Participants generally agreed that staff development is essential if the move to online teaching and learning by an institution is to be successful:

"...there has been a great need to ensure that staff who are involved in the delivery of teaching and support of learning online, are appropriately skilled, to ensure that the quality of learning online for the clients is both effective and efficient." (Juwah)

Slater described the potential outcome if this requirement for staff development is overlooked:

"An attempt to 'mainstream' online teaching as a supplement to face-toface teaching ... has, on the surface, been quite successful. ...

"However, analysis of the teaching web sites highlights a disturbing trend. ... 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." (Salter)

Staff need support to develop both their educational and technical skills and a lack of training can make for an "uneven tutoring balance" amongst tutors (Janes).

"A cost-benefit analysis of the first offering of the first course in the certificate revealed tutor 'time-on-task' to range from one hundred and eighty to four hundred hours in the same thirteen week period." (Janes)

Online tutoring is not an individual experience and staff development support is needed if tutors are to understand the role they are to play amongst learners, adapt from face-to-face to online practices and acquire the skills they will need to develop, implement and support online courses:

"The success of any learning assistance centre and tutoring programme relies on the quality of its tutors ... the implementation of a training plan and on-going professional development activities that promote effective and consistent tutoring is fundamental ... the challenge is to create a training programme that is real-time, interactive and reflective of the organisation's core commitment to human interaction and professional support." (Ehmann)

Suggested ways that at an institutional level that such staff development could occur included :

- "establishing a discussion forum for online tutors for them to share experiences and techniques and best practice, and by organising skills workshops to enable staff to further enhance their skills development." (Juwah).
- A training event which would:

"co-ordinate the work of all the tutors, notably with the local co-ordinators, and *[enable them]* to become familiar with the virtual campus....before the beginning of the collaboration and ...face-to-face.

"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. In small groups, we discussed situations experienced by tutors in previous years. After the training, we observed that the tutors who did not follow the training were less involved with the students." (Daele)

• Entirely online in a staged approach "which tries to integrate learning the software along with experiencing learning online (apprenticeship) and with appropriate online tutoring (we call it e-moderating) at each stage." (Salmon)

Although participants had differing ideas on how staff development could occur most agreed that the institution had to ensure suitable time, resources and support was allocated to all staff to encourage them to adopt the necessary changes to ensure success in the online environment.

As Juwah suggests, enablers in promoting participation by academics in a staff development module include:

- Awareness raising of the importance of skills development.
- A strategic management vision and commitment to online learning.
- A University-wide staff development strategy that focuses on embedding effective use of C&IT in delivering teaching and supporting learning and appropriate skills development.

Institutional support can thus make a difference in this essential skills development area for those involved in online learning and teaching.

Key barriers experienced by staff which need to be overcome, as reported by Littlejohn, include:

- keeping up with the continuous learning activities was a problem for many hard pressed staff,
- technical issues such as installing software,
- participants who found authoring a particularly difficult skill to master,
- the need to remember several passwords (for access, authoring assessments etc.) resulting in some confusion,
- lack of support within departments (both technical and time to develop new teaching strategies).

4 Tutor Support

In order to support online learning and become effective online tutors staff need the support of their institution in a number of ways. The support needed is assistance in designing and delivering online courses (be this technical or administrative), general technical support, staff training and effective support systems for students.

4.1 Creating a supportive environment

Online tutors face challenges on many fronts when supporting online learning:

"Many ... had a steep learning curve to become familiar with traditional university procedures, T171 innovations, FirstClass and the course material." (Morrison)

Often there is no recognition or rewards for innovative staff (Newby-Fraser and Clayton) and they have poor or inadequate working conditions:

"Many staff have to share facilities and offices with other members of their department. Time management and conflicting priorities and commitments (for example, interruptions from colleagues, student management and the telephone) made focusing on a project difficult." (Newby-Fraser and Clayton)

However these issues can be overcome by appropriate institutional support such as release of staff time and technical and administrative support from appropriate skilled staff.

4.2 Designing and delivering online courses

"Designing and developing effective online courses requires attention to technical execution, adaptation of content and course concepts, attention to motivation, and must afford interactivity. Certain aspects are problematic. A vast investment of time during the development and the realisation of such online courses are mandated to maintain organisational and support activities. Online support consisted of technical work as much as online mentoring support." (Scheuermann *et al*, 2000).

It would appear that the experience of the majority of e-workshop participants in course development is that in the beginning they do most of the development and provide both subject and technical support to students. This can often make staff reluctant to get involved:

"It is often assumed that the innovative early adopters, ie some of the participants in this study, should perform all roles when developing course materials for alternate delivery (such as content expert, instructional designer, programmer.... the 'cottage industry model'). This puts unnecessary pressure on staff and makes them reluctant to participate." (Newby-Fraser and Clayton)

Staff involved in designing and developing courses need "the presence of a collaborative team" (Kennedy and Duffy)

"[*The team*] comprises an administrator, programme co-ordinator/director, distance learning writers, technical support staff, librarians and academics. Both the teachers and the participants need that foundation. All need each other."

The online learning experience will be much more effective if a team is involved in providing courses and support instead of an academic tutor trying to play every role and not being able to concentrate on one. As Anderson and Simpson record:

"...working at a programme level rather than with individual courses, online structures were developed to enable interaction yet limit its impact on staff workload."

Supporting online learning innovations at departmental, faculty or institutional level allows sharing of experiences, good practice and solutions to common problems as well as maintaining a record of the development of these innovations.

4.3 Technical support

The vast majority of those involved in developing courses for online learning environments are using technologies that are completely new to them. Many have limited IT skills, which affects their ability to design and deliver such courses. e-Workshop participants obtained such support from technical staff within the institution or from academic colleagues working alongside them designing the courses:

"In my role as facilitator/moderator, I needed the software administrator's support for managing the learning environment. Also, I needed technical support to configure and install the software, as well as to ensure the effective and efficient functioning of the entire set up." (Juwah)

Technical support is required at course development level in configuring and installing software and in ensuring the effective and efficient functioning of the selected online delivery methods. Support can provide by help-desks, dedicated support or information sources, eg often typical problems and solutions can be documented and made available as a list of *Frequently Answered Questions* or FAQs (Ehmann). However the courses that were developed and ran the most smoothly were those that had support from people within the institution with the appropriate technical expertise.

What all participants recognised is that to develop and deliver online courses technical support is required at an advanced level and needs to be continuous in ways that traditional classroom teaching does not require (Finkelstein), for example:

"...[*items*] such as compiling class lists in advance to register students for passwords and systems use, allowing time and utilising personnel to train students and monitoring the system....[*this will*] require high levels of coordination, support and cooperation among a variety of university departments and support sectors, a matter not always easy to achieve even under the best of circumstances."(Finkelstein)

This co-ordinated approach is essential for the successful development and delivery of online courses.

4.4 Supporting students

An important role to be played by those involved in online learning is that of supporting students. Students also face a number of challenges in the online learning environment including administrative and technical difficulties, cultural and time zone differences and course work issues. The tutor often feels a responsibility to assist students in overcoming these problems. The main challenge for the institution is how to provide the students with support in all these areas without the tutor feeling they have to take on all these roles and thus affect the level of learning support they can give. The following sub-sections provide examples how these challenges have been tackled.

4.4.1 Administrative difficulties

As was previously mentioned existing central support services are often not geared towards the varied requirements of online learners and consequently tutors often find themselves playing an intermediary role between administrative staff and students.

Some institutions have resolved these issues by adopted the practice of clearly informing students of 'office hours' when such administrative enquiries will be responded to (Janes, Kennedy and Duffy), eg enquiries will be responded to within twenty-four hours during the working week and that over the weekend any questions will be answered on a Monday morning. Kennedy and Duffy report that in their five-years' experience there have been no complaints about this method. Some institutions also clearly outline the role and duties of the tutor to both the tutor and students, as in Sharpe and Baume:

"Tutor's responsibilities for the online component were made explicit at the start of the course, eg to establish early email contact with individual students, providing email address, phone number and postal address; to facilitate task activities, adding contributions, responding, summarising; to login in two or more times a week; to keep students informed of variations in your own pattern of activity; to respond to/initiate individual contacts throughout the course."

Other solutions include having an induction week before the course starts and allowing any queries relating to administration, registration, finance and other central student support services to be dealt with.

4.4.2 Technical difficulties

When learning online students face many technical challenges including coping with hardware, software, communications and authentication. Some institutions are now specifying the skills participants are expected to have before taking a course of study (Janes). Other institutions are allowing one or two weeks for familiarisation where the students can install and get acquainted with the technology they will be using before the course begins (Creanor).

It is hoped such practices will reduce the amount of time tutors spend trouble-shooting for students. These approaches are seen by those already involved in this area as a great asset "not only in terms of solving technical problems but as well in establishing the students' confidence in the institution, the mode of delivery, method of teaching and ultimately the tutor/moderator [*herself/himself*]". (Kennedy and Duffy)

Services can include lists of Frequent Asked Questions, the provision of step-by-step instructions and access to help-desks via email, conferencing, fax or telephone.

Tutors need to be aware of and familiar with the support services provided by the institution and available to students and be able to direct the student to the appropriate service.

4.4.3 Cultural and time zone difficulties

Online learners can come from a wide variety of backgrounds and countries and with differing social and educational experiences. Tutors when providing support should not forget this.

However, tutors in this area need institutional support. Extra time is needed to support such students especially at the beginning of a course when they may feel awkward and isolated and staff should feel confident that they have the support of the institution in this matter and feel able to call upon support staff with experience in dealing with cultural differences. Again the solution being adopted by some institutions is to have an induction week, almost like an equivalent online freshers' week, were students can introduce themselves to each other and the tutors and thus try and build up some relationships before the course starts in earnest.

These issues are discussed in greater depth in Chapter 6 Culture and Ethics.

4.4.4 Course work

For some students learning online poses just the same difficulties as many traditional based learners face in completing course work but often their difficulties can be greater with employment and families competing for their time.

However, if all the above difficulties relating to administration, technical and cultural and time zone differences are given adequate attention and support by the institution this frees up tutor time to deal with assessment queries, group work issues and so on.

Some course development teams provide additional support, which can be particularly helpful where the online tutors were not involved in developing the course:

"The online activities were prepared in advance by the course team. They are timed and content based and participants are given the schedule at the start of the course. Most activities were facilitated by tutors within their tutor groups and shortly before each activity is due to start, tutors were provided with a briefing sheet on how to run the activity." (Sharpe and Baume)

Some cases studies also suggest that students appreciate being kept on track with the course schedule:

"Students were generally in approval of tutors keeping them up to date and 'on track' for progressing through the course. This was partly achieved by the pre-determined timetable of student progress supported by weekly meetings relating to every one of the learning units, and partly by using the information provided by both TAGS and FirstClass, on the history of student use of each of these media, to remind students who fell behind." (Ewing)

Others suggest that particular guidance and support should be provided for submitting, marking and distributing assignments. Two examples are given below:

"A separate booklet was provided for the students detailing the procedures for electronic submission of assignments. A 'dummy' submission area was also provided, to allow both students and tutors to practise uploading and downloading assignments and using the marking software." (Morrison)

"Participants were given regular and positive feedback. Assignments and activities were graded within ten days of completion (unless notice to the students indicated otherwise). E-mail feedback was assured within forty-eight hours of receipt of the question or comment (often earlier). Tutors practised flexibility and were very accommodating if participants required additional time to finish an assignment. It was important to recognise that these were working professionals with other commitments besides this programme." (Janes)

4.5 Staff development and training

Online learning requires the online tutor to have many new and diverse abilities and skills including:

"...developing new techniques to build rapport with groups of students online, ensure that students are paying attention during the lectures or discussion." (McKenzie)

Although many tutors will have some of these skills from working in a traditional teaching environment they need further training and development to be effective in the online environment.

e-Workshop participants recognised the need for staff training not only in IT skills but also in, change management, mentoring and focus group techniques:

"The face-to-face sessions (Change Management, Train the Internet Trainer, Mentoring, Focus Group Techniques) were conducted in Perth and required participants to travel" (Glass).

However, the means by which such training is delivered and who delivers it can often make the difference as to whether staff take part. One institution used the services of an "expert teacher … who had a high degree of credibility in the [*organisation*], an excellent reputation for teaching quality, and an acknowledged reticence to the intervention of technology into the teaching interactions"(McKenzie) to act as a champion for online learning. This approach was intended to reduce anticipated resistance. Further difficulties in relation to staff training include a lack of funding to enable staff so attend courses and lack of time to enable them to develop and practise the necessary skills.

The most important issue however, is that no matter what training is provided, supporting the online learning experience cannot be an individual project – it has to be seen as holistic with all staff working together as a team for the purpose of ensuring an enjoyable and productive learning experience for all.

These issues are addressed in Chapter 8: Staff Development.

5 Student Support

In order to have a successful online learning experience students need the support of the institution in a number of ways. The major areas of support identified during by OTiS e-workshop participants were in course delivery, central support services and technical support.

Traditionally institutions have had to cater only for full-time on-campus students and parttime students who normally attended campus for limited periods. However, online learners may never attend campus and thus traditional methods of delivering central support and technical services may not be effective for this group.

5.1 Central support services

Underpinning the whole online learning and teaching experience for learners at an institution is the provision of central support services. These range from IT and Library services to student counselling, careers service and financial services. Each of these support services has to be effective in meeting the needs of online learners if the online learning experience is to be comprehensive and complete.

Three OTiS case studies – Gilbert-Hunt and McLaine, Morrison and Creanor – describe a range of approaches to delivering central services to online learners.

- "Student support came through a variety of mediums; the subject materials provided step by step instructions plus the Flexible Learning Centre provides a range of telephone and online support services. During the second half of 1999 UniSaNet has developed a home page which links to further online supports." (Gilbert-Hunt and McLaine)
- "... students received the normal printed induction materials provided by the Open University to all students. These cover University procedures in areas such as grading, degree classification, submission deadlines, querying assignment marks and withdrawal from courses. This material was provided approximately six weeks before the start of the course." (Morrison)
- "Students are invited to an induction weekend during which they are introduced to using the web (navigating, searching, etc) and First Class (downloading the First Class Client, installing on their own machines, sending and receiving messages, attaching files etc). They are also guided through the rules of 'netiquette' and study skills issues for the distance learner, and they are given a set of basic guidelines for online conferencing, including the criteria for assessing their contributions. As not all students manage to attend the induction however, all the information is also available on the course web site. On registering, students receive a CD-ROM containing all the files and information they need. As well as access to a set of FAQs on the course web site, ongoing technical support is provided by the instructional designer through a dedicated First Class conference." (Creanor)

In summary, the experience of OTiS e-Workshop participants suggests that delivering central support services in a way that meets the needs of the online learner is not an easy task. To ensure that the learner engages with all the support services requires a range of delivery approaches – printed materials, induction weeks, online information and multimedia resources can all be used to aid this process.

However, no matter how well planned, problems can still arise:

"The initial dispatch of material was delayed due to a backlog at the dispatch warehouse. No facility existed to prioritise material for a pilot course...

"Students have also had to contend with bulk mailings to all students which contain advice, for example on final project submissions, which contradicted the specific instructions given to T171 students and actually only applied to traditional mailed submissions and courses. Hopefully, these documents will be amended for the current session." (Morrison)

What was significant in this area is that whatever method of delivery is chosen, the institution must consider online learners' preferences and characteristics, for example allowing students a choice of submitting assignments by post, fax or email (McKenzie). It is the institution that must adapt to meet the needs of the online learner:

"If, as predicted, these [*preferences*] are different from those in the prevailing student population, then institutional processes must be redesigned if effective service delivery is to occur" (Dunkin, 2000).

5.2 Technical support

This section reviews the type of technical difficulties (IT, software and communication) being faced by online learners and the methods adopted by e-workshop participants for delivering support to help overcome these. However no amount of user help services will be adequate without a robust and reliable communications and IT infrastructure:

"Problems were also experienced with access to the university servers during the first few weeks, due to the unexpectedly high levels of traffic. The electronic assignment submission system crashed repeatedly, as the size of files submitted by students on this course (including graphics and multiple linked documents) was significantly larger than was usually experienced." (Morrison)

The methods suggested here are not mutually exclusive and in fact are often used in conjunction with one another.

Typical technical difficulties experienced by online learners in a number of OTiS case studies included:

- difficulty in accessing suitable computers which provide reliable and easy access to the web at times suitable to the learner (Ewing),
- difficulty in printing hard copies of online materials due to poor access to reliable local printing (Rotheram),
- technical support to help overcome connection problems to the Internet (Mohamad),
- difficulties in downloading and installing software (eg the latest version of browser, plugins, specialist application software etc),
- difficulties accessing the Internet or specialised services such as real-time chat through company firewalls.

"Some participants had to organise Internet access at home or at their workplace. Some participants had little technical or computer experience and were on a steep learning curve." (Glass)

As Rotherham describes, the majority of support strategies took both preventative and reactive measures to resolve these problems: anticipating and preventing problems, eg through developing the students' IT skills, and trying to resolve difficulties as and when they arose, eg through an IT 'help desk'.

Glass also outlined a method of approach to IT support delivery similar to Rotheram, which was used on her professional development program for Vocation, Education and Training (VET) lecturers across Western Australia.

"Participants were given training in use of the Internet at the beginning of the professional development...

"Just establishing Internet access proved difficult for some participants; these people were given technical help from WestOne." (Glass)

Both case studies provide users/learners with training in appropriate communication and IT skills and provide some sort of IT 'help desk' or technical support person.

To summarise, the experience of the OTiS e-Workshop participants is that students may encounter IT difficulties in:

- accessing suitable computers,
- accessing the Internet in a reliable manner,
- printing,
- software and hardware.

To meet the needs of students by helping them to overcome such difficulties a variety of approaches to IT support can be taken by the institution. The majority of e-workshop participants used a combination of preventative measures (training) and reactive methods (IT helpdesks, technical support personnel), which respond to difficulties as and when they occur. Either of these two methods can be effective if implemented separately but together they stand a better chance of meeting the needs of learners in this area.

However, these approaches will only be effective if thought is given to the needs of the learner and the sort of difficulties they will encounter in the online learning environment.

6 Executive Summary

Institutional support for online teaching and learning includes a number of important elements, for example culture, technological infrastructure, policies and procedures, and appropriate support for staff and students.

Institutional strategies and support are essential to ensure that online teaching and learning opportunities are developed according to the needs of the users and that they are not constrained by institutional culture and current methods of operational delivery.

"The institution in supporting the academic to adopt online communication media must review all of its operating procedures and structures to ensure that the support is holistic." (Dunkin, 2000)

The most effective strategy for providing tutor support in course development appears to be for a variety of staff in the institution to work together as a team, instead of an academic tutor trying to play every role that would be required and not being able to concentrate on one, as recommended by Kennedy and Duffy:

"...the presence of a collaborative team. That comprises an administrator, programme co-ordinator/director, distance learning writers, technical support staff, librarians and academics. Both the teachers and the participants need that foundation. All need each other." (Kennedy and Duffy)

It require high levels of co-ordination, support and cooperation among a variety of university departments and support sectors. This is not always easy to achieve.

In terms of students' support, experience suggests that delivering central support services to an online learner requires a range of delivery methods including printed materials, induction weeks, online information and multimedia resources.

For institutional support to be effective and support online learning initiatives, as summarised by Morrison, institutions must acknowledge that:

- online learning is not a cheap alternative to replace conventional on-site delivery,
- tutoring online is costly of staff time if the learners are to feel adequately supported,
- both tutor and learner need good access to hardware and to a quiet and private work environment people will not interrupt you in class but they will if you are 'only' working at a computer,
- good technical support is also needed for tutors and learners. Expect problems with the technology and you will not be disappointed.

Finally, Dunkin sums up the experiences and opinions of the OTiS e-Workshop:

"... some portray the implementation of online delivery as merely adding to the institution greater flexibility in its modes of delivery, or learning, it is in fact significantly more than this. It requires all members of the institutional community to re-examine the principles and assumptions that underlie their operating processes." (Dunkin, 2000)

Appendix A References and Sources

A.1 Conference sources

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Emma Templeton is based at the Centre for Open and Distance Learning at The Robert Gordon University, Aberdeen where she advises staff on developing materials for online course delivery, supports staff and students in the use of the university's Virtual Campus and helps promote best practice in e-Learning. Emma was project officer and resource librarian for the Online Tutoring Skills project (OTiS), in partnership with Heriot-Watt University.