

Staff Access to ICT Based Communications

Final Report of a JISC Study

Louise Cooke, Helen Greenwood & Sally Maynard

October 2006

Department of
Inform@tion Science

Contact: Dr Louise Cooke
L.Cooke@lboro.ac.uk

LISU Research & consultancy
for performance management
Information, cultural & academic services

 **Loughborough
University**

Contents

Acknowledgements.....	ii
Executive Summary.....	iii
1. Background.....	1
2. Aims and Objectives	2
3. Methodology and Implementation.....	3
4. Project Findings	7
4.1 Desk research.....	7
4.2 Questionnaire survey	8
4.3 Case studies	20
5. Conclusions	49
Appendix A: Online questionnaire	53
Appendix B: Summary statistics	61
Appendix C: Case study protocol	69
Appendix D: Case study participants.....	71

Acknowledgements

The project team would like to thank the project sponsors, the Joint Information Systems Committee (JISC), who funded the work, and in particular Andrew Dyson, Management and Leadership Programmes Director at JISC for his helpful advice and guidance throughout.

We are also indebted to all those who gave their valuable time to participate in the research. This includes all those who responded to our questionnaire, and especially those who volunteered their co-operation as a case study site. In particular, we are grateful to all those at Lauder College, Loughborough College, the Causeway Institute, University of Wales Bangor, University of Chichester and Loughborough University who made time to talk to us and share their experience (*see Appendix D*).

Our grateful thanks are also due to the following who helped by piloting the questionnaire and giving us much useful feedback and advice:

- Dr Roy Adams, Director of Information Services and Systems, De Montfort University
- Dr Helen Fletcher, Head of Learning and Information Services, Buckinghamshire Chilterns University College;
- Rob Kirkwood, Head of Customer Support, Computing Services, Loughborough University.

In addition, the authors wish to acknowledge the assistance of staff at LISU over the course of the project.

Executive Summary

Further and Higher Education organisations are placing an increased reliance on Information and Communications Technologies (ICT) such as the use of email and intranets to conduct their business activities. However, this may be to the detriment of personnel who do not have access to such technologies. The project aimed to assess the extent of restrictions in access to ICT by staff within Further and Higher Education Institutions in the UK, and to evaluate the impact on the effectiveness of individuals and institutions of any such restrictions. It also aimed to identify examples of best practice in extending staff access to ICT or in mitigating the negative impact of restricted access.

The overall research approach comprised a combination of desk research; a web-based questionnaire survey distributed to all relevant institutions in the sector; and in-depth case studies at three FE colleges, a new university and two old universities. A post-project seminar is planned to disseminate findings and to further the sharing of best practice initiated by the project.

Around one third of all institutions in the sector responded to the questionnaire. Overall, there appears to be recognition at institutional level that all staff should have some access to ICT, and in the majority of respondent institutions this has been formalised into policies governing the principles of staff access to ICT and / or corporate information dissemination. Provision of ICT hardware and network infrastructure appears now to be less of a problem than lack of ICT skills, lack of motivation either to use computers or to gain ICT skills, and line manager resistance to staff using computers in work time.

In both FE and HE, job function was the most frequently cited factor affecting access to ICT. Lack of access is most likely to occur with cleaning and catering staff, especially when these services are outsourced, and to a lesser extent, estates and maintenance personnel. Catering, cleaning and estates staff are also those least likely to have access to ICT training. This is shown to impact negatively on the implementation of new computerised systems that offer potential efficiency gains to institutions. However, there were also many examples of institutions who are taking initiatives to improve the provision of PCs and access to training for manual staff: some of these are described in detail in the report. In FE the combination of increased use of ILT combined with large numbers of part-time sessional staff and community-based staff also poses difficulties with regard to access to ICT. However, the research findings suggest that the real dilemma with regard to achieving universal access to ICT rests primarily in winning over the 'hearts and minds' of staff (and sometimes, those of their line managers). As a result of the current gaps in access, there is a need to duplicate much electronic information provision, either through the use of hard copy or via verbal briefings. Although currently essential in order to ensure inclusive access to information, this represents a resource-intensive process, that risks detracting from institutional efficiency.

The research identified a number of examples of good practice on the part of institutions. The report concludes that the main issue of concern for institutions is less one of access to computers as of access to information. Moreover the difference between information provision and the communication of information is highlighted: ensuring that relevant information reaches its destination, is read and understood, is not simply a matter of putting a document on an intranet or sending an email. Assisting institutions with the development and implementation of institutional communication strategies is therefore identified as an area where further work would be beneficial.

1. Background

1.1 ICT-based communication in Further and Higher Education

As in other private and public sector organisations, Further and Higher Education institutions in the UK are placing an increased reliance on ICT-based systems in order to conduct their business activities with maximum efficiency. In addition to the use of email for one-to-one communication, important information is disseminated institution-wide or to members of specific groups via email lists; policy documents, strategies and practical information are now all routinely made available to staff on Intranets and corporate websites; Virtual Learning Environments, Computer-Aided Assessment and technology-based multimedia applications are commonly used to enhance the learning and teaching experience within education. Indeed, the use of new technology to support learning and educational administration has received considerable government support and encouragement¹²³.

1.2 Restrictions on access

However, whilst the sector has made significant – and rapid – progress towards the improvement of network infrastructure and the provision of computer hardware, there had not previously been any substantive evidence-based research across the sector to establish the extent to which access to ICT-based communications was available to all personnel within an institution. It seemed likely that a significant proportion of staff might be excluded from this access, whether by virtue of their job function, their conditions of contract (e.g. part-time or fixed-term) or their geographical isolation. Whilst for some, access to ICT may not comprise a core component of their day-to-day work, the resultant loss of access to key corporate and external sources of information may perpetuate and extend existing inequalities amongst personnel, creating a ‘digital divide’ between the ‘information-rich’ and the ‘information poor’⁴. It was also considered likely that restrictions on access to ICT might be constraining the efficiency and effectiveness of institutions. This project therefore aimed to quantify the extent of such restrictions on access across the sector, as well as to conduct a qualitative analysis of its impact. In addition, it set out to identify examples of current best practice in institutions that have achieved universal access or that are taking measures to extend the range of personnel with access. It also looked to identify the specific methods that different institutions have adopted in order to ensure inclusive communication to all personnel irrespective of role or function.

1.3 The project report

This report presents the findings of the project. It contains a series of recommendations with regard to communications strategies aimed at Senior Management in Further and Higher Education institutions. We hope that it will act as a catalyst for awareness-raising of the importance of this issue, as well as providing a means for disseminating some of the many examples of good practice that we found were already being implemented in institutions across the Further and Higher Education sector.

¹ DfES (2005) *Harnessing Technology: Transforming Learning and Children’s Services*. Nottingham: DfES. Available at: <http://www.dfes.gov.uk/publications/e-strategy/docs/e-strategy.pdf>

² HEFCE (2005) *HEFCE Strategy for E-learning*. Bristol: HEFCE. Available at: http://www.hefce.ac.uk/pubs/hefce/2005/05_12/05_12.pdf

³ Becta (2004) *ICT and E-learning: Embedded Technology, Evolving Practice*. Coventry: Becta. Available at: http://www.becta.org.uk/page_documents/research/ict_elearning_fe.pdf

⁴ For more on this point, see Norris, P. (2001) *Digital Divide: Civic Engagement, Information Poverty and the Internet*. Cambridge: Cambridge University Press.

2. Aims and Objectives

2.1 Project aims

The project aimed to investigate the extent of restricted access to ICT-based communications and its impact upon staff and institutional effectiveness across Further and Higher Education within the UK.

2.2 Project objectives

In order to achieve this aim, the following objectives were identified:

- To carry out desk research in order to evaluate current knowledge in the field;
- To survey all FE Institutions in England that provide courses at HE level, all FE institutions within Scotland, Wales and N. Ireland, and all UK HE Institutions that receive support from the Higher Education Funding Councils, in order to evaluate the extent of staff access to ICT;
- To identify and collect relevant institutional policy documents relating to staff ICT access and to the use of ICT to disseminate corporate information;
- To find out more about the roles, functions and status of any personnel with restricted access;
- To identify barriers other than restricted access to hardware or network infrastructure that inhibit effective staff use of ICT based communication;
- To investigate the extent to which institutions rely on the use of ICT to support and enhance the teaching and learning process;
- To identify what provision is made within the institutions with regard to staff training in the use of ICT, and to whom such training is made available;
- To identify examples of best practice in extending staff access to ICT or in mitigating the negative impact of restricted access;
- To carry out case studies within a range of Further and Higher Education institutions, distributed across all four countries in the UK and with representation from both the new and the old university sectors;
- To hold a project seminar for practitioners to share experience;
- To present the findings of the project in a final report to the sponsoring body, and to disseminate the findings via this report.

2.3 Changes to aims and objectives

The project aim did not change over the life cycle of the project. Although there were some minor changes of emphasis and detail to some of the objectives, they remained otherwise unchanged. In this respect, the investigation of non-infrastructure-related barriers to access assumed a greater importance than was originally anticipated. In addition, the seminar changed from its initial conception as a fact-finding forum to one of a findings dissemination forum.

3. Methodology and Implementation

3.1 Overall research approach

The overall research approach comprised a combination of desk research, a web-based questionnaire survey distributed to all relevant institutions in the sector, and six in-depth case studies carried out at a targeted selection of institutions. It was anticipated that this combination of methods would allow for the collection of wide-scale quantitative data that offered a broad and representative overview of the issue across the UK Further and Higher Education sector, as well as allowing for a richer, more qualitative insight into specific issues within particular institutions. The methodology adopted for each of these components is described in detail below, as are the reasons for choosing such methods. Finally, specific issues that had to be addressed by the methodology are noted.

3.2 Desk research

A literature search was carried out in order to identify and learn from any previous work in this area, and to establish the context for the work. As part of this component of the study, relevant bibliographic databases such as ArticleFirst, Education Resources Information Center (ERIC) and the British Education Internet Catalogue were searched, and existing secondary statistics such as those collected by Becta in a 2004 ILT survey⁵ and annual statistics collected by the Universities and Colleges Information Systems Association (UCISA) have been investigated.

3.3 Questionnaire survey

3.3.1 Survey design and piloting

A web-based questionnaire (*see Appendix A*) was designed with the intention of collecting predominantly factual information from institutions. This part of the research was intended principally to address the quantitative aspects of assessing levels of restricted or non-existent access to ICT systems. Questions were generally closed, although where appropriate an 'other' category was offered with an opportunity to elaborate. Respondents were asked about:

- The existence of any formal policy documents outlining the principles of access to ICT-based communications within the institution, and of any stated policies with regard to the use of electronic communications media to disseminate corporate information;
- The extent to which hard copy provision of information otherwise disseminated electronically is made available to those without access or to those with limited access;
- The use of VLEs and other multimedia applications in the learning and teaching process;
- Quantitative data on personnel without access or with restricted access, together with data on their functions and status within the organisation;
- The provision of training in the use of ICT systems, and to which categories of staff such training is made available;

⁵ Becta (2004) *Summary of ILT Survey 2004*, <http://ferl.becta.org.uk/display.cfm?resid=7896>

- Any examples of current initiatives within the organisation that are intended to extend access or to counter the negative impact of restricted or non-existent access

In addition, the questionnaire asked respondents whether they were willing to participate further with the research by acting as a case study site, and if so, requested them to provide contact details. Where respondents did not volunteer to participate in this way, they were not required to provide their name or contact details, although they were asked to provide the name of the respondent institution.

Prior to dissemination, the initial draft questionnaire was piloted within three different institutions, in order to modify any ambiguous wording or other questionnaire design issues. This resulted in much useful feedback and some subsequent changes in the wording of some questions.

3.3.2 Questionnaire distribution

In order to minimise costs, the questionnaire was distributed electronically to a named individual in each of the HEFCE-funded Higher and Further Education institutions in the UK, thus ensuring that the full population of institutions were offered an opportunity to participate in the research. This was intended to avoid the possibility of researcher-bias with regard to sample selection. In the 159 Higher Education Institutions the survey was addressed to the Pro-Vice Chancellor with line management responsibility for Information Services and Systems, and in the 212 Further Education Institutions it was addressed directly to the Institution's Principal. The rationale behind this decision was to aim to get as impartial a perspective as possible: it was felt that targeting Heads of Information Services and Systems might have led to responses reflecting a more 'partisan' view of provision within their institution. As a further check against potential bias of responses, questions were worded such as to capture primarily factual rather than opinion-based information. Institutions that had not returned a completed questionnaire within a three-week period were contacted again, and reminded of the importance of the survey.

3.3.3 Data analysis

Prior to analysis, the data were checked and grouped into Further and Higher Education responses. In the case of two institutions, two responses were received from different individuals within each institution. In order to maximise the number of responses for analysis, each of the pairs of responses have been combined, such that the data have been included where the two responses concurred. However, where conflicting answers were given, the data have been excluded from the analysis. In a few cases, it was clear that respondents had misunderstood the question. Where possible, these responses have been adjusted, or otherwise excluded from the analysis.

The responses have been analysed by sector and the two sectors statistically compared, to identify any significant differences between the two groups of responses. Summary statistics for each question are included in [Appendix B](#).

3.4 Case studies

3.4.1 Selection of case study sites

Six institutions that had agreed to co-operate further with the research were selected as case study sites, in order to provide a more in-depth qualitative insight than could be obtained from the questionnaire data. This was particularly important with regard to the

impact of limits to network access on institutional effectiveness and efficiency, and with regard to the identification of good practice within individual institutions. In order to achieve a balanced perspective, three institutions were selected from the Further Education sector, and three from the Higher Education sector. With regard to the latter, care was taken to include at least one institution from each of the ‘new’ (i.e. post-1992) and the ‘old’ university sectors. Further selection criteria included ensuring a geographic distribution that included institutions from England, Northern Ireland, Scotland and Wales. Within these parameters, institutions were then selected according to the ‘intrinsic interest’⁶ of their questionnaire responses and, to a lesser extent, by their accessibility to the research team. The final selection comprised:

Further Education	Higher Education
Causeway Institute, Coleraine, N. Ireland	University of Wales, Bangor, Wales
Lauder College, Dunfermline, Scotland	University of Chichester, England
Loughborough College, England	Loughborough University, England

3.4.2 Case study methods

Fieldwork for the case studies was carried out between July and early September 2006. A case study protocol (*see Appendix C*) was drafted in advance, outlining the proposed data collection procedures, including ethical issues such as confidentiality and consent. The questionnaire respondent was contacted initially to find out whether the institution was still willing to participate, and to arrange mutually convenient dates for the researchers to visit. A copy of the case study protocol was also sent to them to offer further information about the purpose of the research. This respondent (in all cases, the Director of Information Services, Manager responsible for Information Technology, or their equivalent) was also instrumental in arranging for the researchers to meet with relevant personnel within the institution.

At each site, a series of semi-structured face-to-face interviews were conducted with a range of personnel (*Appendix D*). Although the actual job titles of specific individuals who were interviewed did, of necessity, vary somewhat between institutions, interviews in each institution were held with representatives of some or all of the following departments/functions:

- IT and Information Services (usually the Director);
- Estates Department (where possible, both the Head of Department and operational personnel);
- Equality and Diversity;
- E-learning champion.

Other staff involved in interviews at one or more of the case study sites included representatives from Staff Development and Personnel departments, teaching staff and a Trade Union representative.

⁶ Stake, R. (1995) *The Art of Case Study Research*, Thousand Oaks, Ca., Sage.

Interviews were recorded with the permission of interviewees, although tapes were not fully transcribed – data analysis relied mainly on the interviewers' field notes, with the tapes acting as a back-up source for verification. Individuals and institutions were offered the possibility of remaining anonymous in the final project report: in the event, all were happy to be identified. Interviews generally lasted between 30 and 45 minutes.

3.4.3 Question Framework

Although specific questions that were asked were guided both by responses to the initial questionnaire and by the interviewee's role and function, and the semi-structured nature of the interviews meant that some topics were discussed in greater depth by some interviewees than others, the following general themes were explored, at least to some extent, in all interviews:

- The existence and implementation of institutional communication policies;
- The use of ICT to disseminate corporate information, and the use of alternative dissemination mechanisms;
- Categories of staff with limited or no access to ICT, and how this impacts on their work and their access to corporate information;
- The provision of training in the use of ICT systems, and to which categories of staff such training is made available;
- Examples of the negative impact of restrictions on access with regard to individuals' and institutions' effectiveness and efficiency;
- Examples of current initiatives within institutions that are intended to improve the effectiveness of institutional communication or to extend access to ICT-based communications.

Where possible, copies of relevant documentation (such as institutional communication policies) were also obtained.

3.5 Research limitations

The research was limited by the time period available for the investigation (six months). It can therefore provide a 'snapshot' of the situation prevailing at the point of data collection, but does not offer a significant longitudinal insight into developments in access over time, nor is it able to evaluate improvements in practice that result from the work of the project. It is suggested that this would be an appropriate topic for a subsequent evaluation project.

4. Project Findings

4.1 Desk research

A comprehensive literature search was carried out, utilising all of the relevant databases available through Loughborough University library. These included ArticleFirst, LISA (Library and Information Science Abstracts), British Humanities Index (BHI), Education Resources Information Center (ERIC) and the British Education Internet Catalogue. The following terms were used:

- Access to ICT/access to IT
- Staff access universal
- Staff access
- Empowerment of ICT/empowerment of IT
- ICT education sector
- Non-access to ICT/non-access to IT
- Lack of access to ICT/lack of access to IT

Varying amounts of entries were found using these terms, most of which related to access to ICT for all in the sense of the general public. When the search was narrowed down to Further and Higher Education institutions, entries identified were mostly concerned with access for students and staff with disabilities in such establishments. None of these were relevant to the project.

Since the AUA (Association of University Administrators) has an interest in the subject of equal access to ICT for staff, it was also thought that their journal, *Perspectives*, might have some material of interest. As a result, the database entitled ArticleFirst was searched for this journal for the previous ten years. Once again, nothing of interest to the project was discovered.

Research of some interest was identified: a survey carried out by Becta on behalf of the LSC (Learning and Skills Council), entitled “*ICT and e-learning in Further Education: embedded technology, evolving practice*”. The 2004 report⁵ is the most recent in the series of regular survey reports and claims that “*access to ICT ... for staff has reached target levels set by the National Learning Network (NLN)*”. However, the target set relates only to permanent members of teaching staff and fails therefore to take into account any contract teaching staff or other types of staff employed. It is encouraging, though that the target of one internet-connected computer to every permanent member of teaching staff had been achieved or bettered by 46% of colleges, and that this had increased from 26% the previous year. Indeed, the median value of the ratio of internet-connected computers to permanent teaching staff had fallen from 3.0 staff for every machine in 2000, to the target level of 1.0 in 2004.

In addition, the annual statistics from UCISA⁷ (Universities and Colleges Information Systems Association) are of some interest. UCISA represents almost all the major UK universities and Higher Education colleges and has a growing membership among Further Education colleges. The most recent figures are for 2004-05, and show that the current provision for staff is an average of 1.1 staff per staff workstation. This figure is derived from the total number of staff workstations in the institution and has remained relatively constant for the last eight years. It is encouraging that, given the increasing reliance on computers in the workplace, there was approximately one FTE staff member per staff workstation in 2004-05. Figures from the UCISA survey also show that the average number of hours of IT training for staff has been decreasing in recent years – the average in 2004-05 was 1.2 hours per member of staff.

4.2 Questionnaire survey

4.2.1 Response rate

The questionnaire was distributed to 371 institutions in total, comprising 212 FEIs and 159 HEIs. Although the initial response to the questionnaire was slow, email reminders and an extension to the completion deadline helped to achieve a pleasing overall response rate of 32.6% (n=121). Figure 1 shows the response rate by sector and country.

Figure 1 Questionnaire response rate

	Further Education	Higher Education
England	27%	32%
Scotland	35%	53%
Wales	53%	42%
Northern Ireland	31%	33%
UK	31%	35%
	n=65	n=56

The data have been analysed by sector, and the two sectors compared. Where statistically significant differences have been found between Higher and Further Education responses, it is noted in the text. All statistically significant results are at the 5% level, unless stated otherwise. For ease of reference, the analysis follows the same order as the online questionnaire (*Appendix A*).

4.2.2 Communications policy

Respondents were asked whether their institution has a stated policy or policies related to the use of electronic communications media for the internal dissemination of information. In FE, half of the responding institutions have a communications policy, and almost half do not. In two cases, the answer was not known. Significantly fewer (31%) of the responding HEIs have a communications policy. 37 out of the 55 HE respondents (67%) said they did not have a policy, and one respondent did not know.

⁷ UCISA (2006) *Higher Education Information Technology Statistics 2005*, <http://www.ucisa.ac.uk/activities/stats/stats05.htm>

Several respondents commented that although they do not have formal policies in place, there are informal arrangements for the dissemination of information. For example:

'Although there is no formal policy statement, there is substantial use of electronic communications for the internal dissemination of corporate information.' (FE)

'There's a lot of well-known practice, but not a lot of policy.' (HE)

'[HEI A] has principles in relation to electronic communication media, but these are not necessarily expressed in formal policies. For example, the decision to make "kiosk" PCs available, so that everyone could access the Web and email, was made at the highest level in the institution but was not (to the best of my knowledge) formally expressed in policy terms.'

Another HE respondent said: *'Although we do not have formal, published policies in this area, the arrangements are clearly understood by staff disseminating corporate information.'*

4.2.2.1 Availability

Of those institutions with a communications policy who gave a complete response to question 1a (*Appendix A*), the majority of FE institutions (79%) make the policy available to all staff. All but two of the responding institutions (93%) make the policy available to all staff *groups* (although not necessarily to all staff within these groups). One institution said that not all academic or clerical staff have access to the policy; three said the same for estates staff, and four said this for cleaning and catering staff. In two institutions, all catering staff are without access to the policy, and in one institution this is also true of cleaning staff. (Research staff have been excluded from this analysis, as the majority of FEIs do not have research-only staff.)

In the responding HEIs there were no entire staff groups without access to the communications policy. However, in 2 institutions (13%) some staff within estates, catering and cleaning functions do not have access to the policy.

4.2.2.2 Means of making staff aware of the policy

Means of making staff aware of the policy/policies are shown in figure 2. In each case, the first column shows the number of respondents citing a particular means, and the second column the percentage of the total respondents who said a particular means was used in their institution.

4.2.2.3 Variation between staff groups

In the majority of cases (90% FE and 74% HE), the means of making staff aware of the communications policy at each institution did not vary between staff groups. Where there was variance between staff groups, respondents were asked to give details:

- Cleaning, catering and estates staff may have very little or no use of email or internet
- Some Heads Of Department may not disseminate information to the same extent
- Information is made available in the same way *'but how this is promoted (and how many cleaners have access to a PC) will be wildly different'*.
- Access restricted by username and password.

Figure 2 Means of making staff aware of the institutional communication policy

	Further Education		Higher Education	
	No. of respondents	%	No. of respondents	%
	(n=34)		(n=18)	
Intranet	24	71%	7	39%
Staff induction	9	26%	4	22%
Email	4	12%	5	28%
Newsletter/bulletin	4	12%	1	6%
Extranet/web	3	9%	6	33%
Team/departmental meetings	3	9%	2	11%
Staff development sessions	2	6%	1	6%
Required to sign to accept policy	2	6%	1	6%
Staff handbook	2	6%	-	-
Payslips	2	6%	-	-
Notice boards	2	6%	-	-
Cascaded from managers	1	3%	2	11%
Memos	1	3%	1	6%
Reminders at log-on	1	3%	-	-
Institutional briefing sessions/staff conferences	1	3%	-	-
Professional Development Review process	-	-	1	6%
Shared drive	-	-	1	6%

Note: Percentages do not total 100, as many respondents cited more than one means

4.2.3 Availability of corporate documentation by hard copy

In around 80% of both HE and FE institutions copies of corporate documentation are made available on paper.

4.2.3.1 Availability to staff

Of those respondents who gave a complete response to question 2a (*Appendix A*), 87% of FEIs make hard copies available to all staff groups. However, within staff groups, there are some institutions where hard copies are not available to certain staff, and hard copies are only made available to all staff in 59% of institutions. In three quarters of responding institutions, hard copies are available to all academic staff, compared to around three fifths of cleaning, catering and estates staff. Of the latter three groups, availability is particularly low for cleaning and catering staff, where 13% and 10% of respondents respectively said that hard copies were not available to any staff in these groups and a further 28% and 31% respectively said that only some staff in these groups have access to hard copies of corporate documentation. (Research staff have been excluded from this analysis, as the majority of FEIs do not have research-only staff.)

In HE, the picture is very similar, although there is less disparity between staff groups. Hard copies are available to all catering and cleaning staff in a slightly lower proportion (53%) of the responding institutions.

4.2.3.2 Means of making hard copies available to staff

Respondents were asked to give details of how hard copies of corporate documentation are made available to staff. Figure 3 details the means cited by respondents, although it is worth noting that several respondents said the means of making information available depends on the nature of the information. For example, one FE respondent stated:

'Depends on the type, relevance and volume of documentation. Some is for reference in the library, some is held at department level in a departmental office, some is distributed to all individuals'.

Figure 3 Means of making hard copies available to staff

	Further Education		Higher Education	
	No. of respondents (n=43)	%	No. of respondents (n=40)	%
In Library/Learning Resource Centre	14	33%	11	28%
Available on request	8	19%	15	38%
Mailings	8	19%	6	15%
Through depts/managers/teams/admin	7	16%	11	28%
In newsletter/bulletin	5	12%	2	5%
At induction	3	7%	2	5%
Notice boards	2	5%	1	3%
At meetings	2	5%	1	3%
Copies available from HR	2	5%	-	-
In staff manual	1	2%	1	3%
At staff conferences	1	2%	-	-
During appraisal	1	2%	-	-
With payslips	-	-	1	3%
Booklets	-	-	1	3%
At training sessions	-	-	1	3%

Note: Percentages do not total 100, as many respondents cited more than one means

4.2.4 Access policy

In FE, 68% of respondents said they have a policy or policies outlining the principles of access to ICT-based communications within their institution. This compares to 56% of respondents in HE. Three FEIs (5%) said they did not know whether there was a policy in their institution. In common with institutional communications policies, some respondents said that the principles of staff access to ICT are not formalised into a policy in their institution. For example:

'Although we have no fixed strategy for improving access we do constantly embrace new technologies as they become available and have clearly identified practical application' (HE)

'We don't have a formal policy but the principle of access to corporate information is included in the Information strategy.' (HE)

'Although policy is not formal .. there is an informal expectation that all staff will have access to ICT-based communications.' (HE)

4.2.4.1 Availability

Of those respondents who gave a complete response to question 3a (*Appendix A*), in 84% of FE institutions all staff *groups* have access to the institutional access policy. However, slightly fewer respondents (78%) said that all staff have access, because in some institutions hard copies are not available to certain staff within a particular group. In over 90% of the responding FE institutions the access policy is made available to all academic, academic-related, clerical, technical and estates staff. However, this is only true for cleaning and catering staff in around three quarters of the responding institutions. In fact, four respondents (13%) said that no catering staff have access to the institutional access policy, and three (9%) said the same of cleaning staff.

Although the findings for HE are broadly similar, there are slightly fewer instances (11%) where particular staff groups do not have access to the policy. In addition, there are no academic, academic-related, research, clerical, technical and estates staff without access to the institutional access policy. The proportions of respondents reporting that cleaning and catering staff groups are without access to the policy are also lower, at 11% and 7% respectively.

4.2.4.2 Content of policy

Respondents were asked to supply details of what is covered by their institutional access policy. Acceptable use (in particular use of email and the internet) featured strongly in the policies of both FE and HE respondents, although it is interesting to note that, in contrast to HE respondents, four FE respondents specifically mentioned monitoring arrangements as being part of their policy. Network security issues were also a feature of a number of the policies in both HE and FE. Other areas covered by the respondents' access policies included:

- Access to equipment and institutional network, remote access (FE & HE)
- Entitlement to IT accounts and email (FE & HE)
- Provision and replacement of equipment (FE & HE). Standard PC specifications (FE)
- What is available electronically, responsibilities for the dissemination of information and who has access (FE & HE)
- Best practice in file management/back-up (FE & HE)
- Freedom of Information (HE)
- ICT Training (HE) / guidance on VLE (FE).

4.2.4.2 Means of making staff aware of the policy

In FE, the primary means of making staff aware of the policy was stated to be other means (55%), followed by email (50%) and e-notices (43%). In HE, the primary method used in the responding institutions was e-notices (61%), other means (55%) and email (42%). Other means are listed in figure 4. Where there were sufficient data to statistically test for differences between FE and HE responses, no significant differences were found.

Figure 4 Other means of making staff aware of the institutional access policy

	Further Education		Higher Education	
	No. of respondents	%	No. of respondents	%
	(n=30)		(n=25)	
Intranet	10	33%	3	12%
Staff induction	7	23%	6	24%
Letter of appointment/joining Instructions/required to sign	5	17%	4	16%
Staff manual/handbook	3	10%	2	8%
Distribution of policy in hardcopy	3	10%	-	-
Team/departmental meetings	3	10%	-	-
Newsletter/bulletin	3	10%	-	-
Reminders at log-on	2	7%	2	8%
Institutional briefing sessions/staff conferences	2	7%	1	4%
Staff development sessions	1	3%	1	4%
Consultation	-	-	1	4%
With end of year tax statement	-	-	1	4%

Note: Percentages do not total 100, as many respondents cited more than one means

4.2.4.3 Variation between staff groups

In the vast majority of responding institutions (89% FE, 82% HE) , the means of making staff aware of the access policy did not vary between staff groups.

Where there was variance between staff groups, respondents were asked to give details:

- Not all staff have access to email, and those that do may not actively use it.
- Policy is available on the intranet, but hard copies are available in all teaching rooms and offices with computers, *'so for example catering staff would be unlikely to see a copy unless they specifically made arrangements to get onto a computer (highly unlikely)'*.
- Three HE respondents mentioned variation between departments. For example, one respondent said: *'There is stronger interest within some groups and departments. Another stated: 'There may be variance in how and when individual Schools and Departments communicate policy, reflecting their individual work practices.'*

Figure 5 Proportion of institutions with policies covering communications and access to ICT

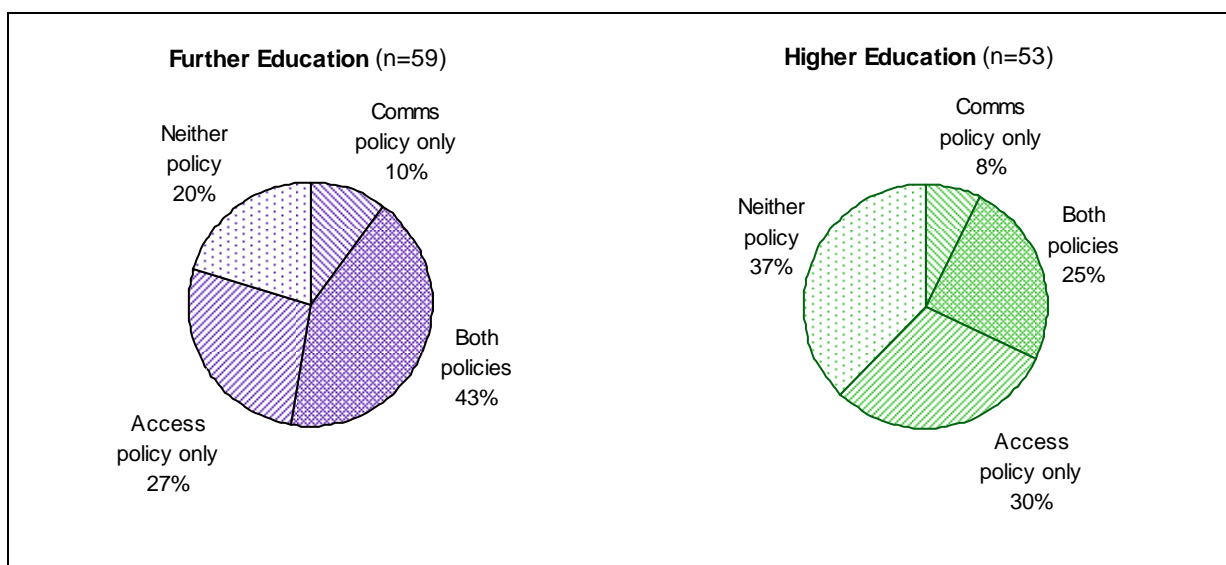


Figure 5 confirms that, in the responding institutions, HEIs are less likely than their FE counterparts to have policies governing the principles of staff communication and access to ICT. However, as already outlined, more HEIs mentioned informal arrangements for communication and access. Interestingly, one HE respondent said:

'Policy formulation has concentrated over the past three years or so upon the highest priorities: i.e. regulatory compliance, information security and acceptable use. Having addressed these we are now turning our attention to information management and dissemination, firstly regarding email good practice, but we need to get to grips with information classification and electronic record/document/content management. Without these, widening access to information could quickly become out of control.'

4.2.5 Factors affecting staff access to ICT

Respondents were asked to select from a list which factors affect staff access to ICT within their institution (Figure 6).

Figure 6 Factors affecting staff access to ICT, ranked by sector

Further Education		Higher Education	
Factor	% respondents (n=60)	Factor	% respondents (n=52)
1 Job function	68%	1 Job function	87%
2 Geographical location	38%	2 Level of ICT skills	27%
3 = Level of ICT skills	37%	3 Geographical location	21%
3 = Type of contract	37%	4 Type of contract	19%
5 Financial constraints	32%	5 Financial constraints	15%
6 Status/seniority	25%	6 Status/seniority	13%

Note: Percentages do not total 100, as respondents could select more than one factor

Interestingly, four FE respondents said that all of the above factors affect staff access to ICT. The majority of the factors listed under 'other' were either stated to be 'none' or were

covered by the above factors, although 3 FE respondents (5%) cited physical building constraints/space as an issue in their institution. One HE respondent said that sharing of offices/desks was a factor in their institution. In additional comments made on the questionnaire, another HE respondent remarked:

'There is a genuine wish among the relevant parties to provide better access for all staff to networked information. The problem for all those concerned is finding the time and resources to give it the priority it needs.'

4.2.5.1 Differences between FE and HE

When the data for FE and HE were statistically compared, significant differences were found between the importance of the following factors for the two sectors:

More important in FE than HE

- Financial constraints
- Contract type
- Geography
- Status/seniority

More important in HE than FE:

- Job function

With regard to the impact of contract type on staff access to ICT, FE respondents frequently mentioned that part-time staff tend to share PCs, particularly part-time or sessional teaching staff.

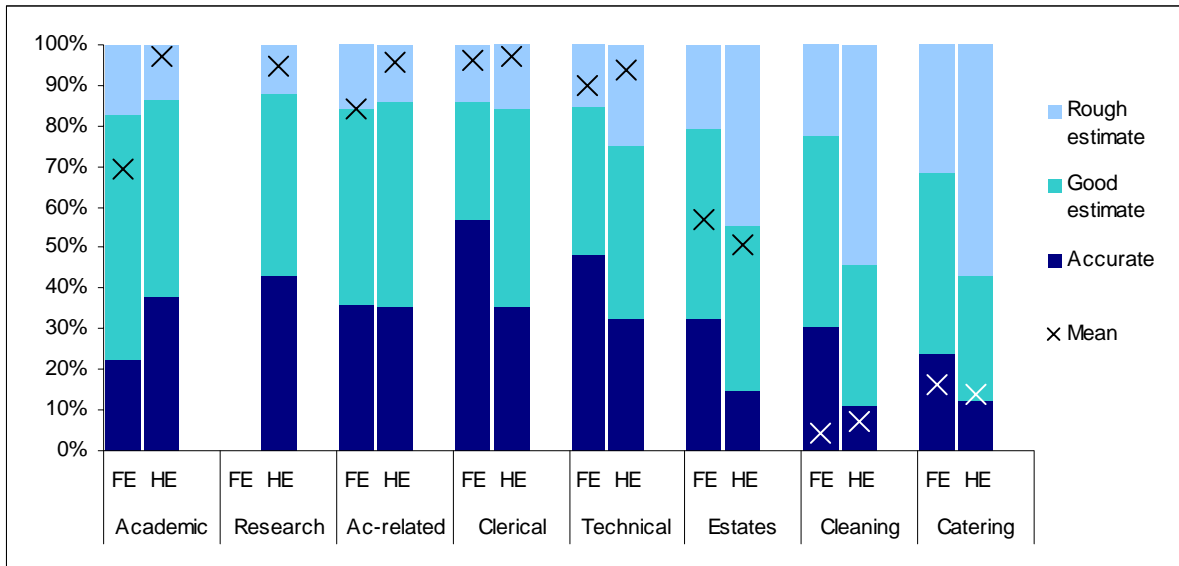
4.2.6 Policies determining which staff have their own computer

The majority of responding institutions in both FE and HE did not have a formal policy governing which staff have their own PC (73% and 89% respectively). Higher Education institutions were found to be significantly less likely than their FE counterparts to have a policy relating to who has a PC for their individual use, and two HE respondents specifically mentioned that PC provision is managed at departmental level.

4.2.7 Computers for individual staff use

Respondents were asked to supply the proportion of staff within given staff groups who have a networked PC for their individual use, and to state whether each figure was accurate, a good estimate or a rough estimate. Figure 7 shows the mean proportion for each staff group, together with details of accuracy. The mean proportions should be treated with caution as some of the contributing figures are estimated.

Figure 7 Staff with a PC for their individual use



With the exception of estates and catering staff, staff in Higher Education appear to be more likely to have a PC for their individual use than their FE counterparts. In HE, significantly higher proportions of academic and academic related staff (at the 1% level) were reported to have a PC for their individual use, than in the responding FEIs. No significant differences were found between the sectors with regard to other groups of staff.

It is noteworthy that three FE respondents voiced concern at an approach to provision where the emphasis is on staff to PC ratios:

‘Many studies home in on the ratios of people to machines. While this gives some quantitative indication it doesn’t really give any indication of use. Unfortunately it is a constant juggling act between leaving PCs unused in offices and giving unimpeded access to all.’

‘Focusing on PCs on academic staff desks or laptops for all academic staff can be problematic. Similarly ratios for staff to PCs can also be misleading. The key objective is to ensure that all staff have access to the right quality of ICT, ICT support and opportunities for ICT staff development when they need it.’

‘The need now is not within college but outside. All staff need and should have access to home access to the college information systems’.

4.2.7.2 Accuracy of figures

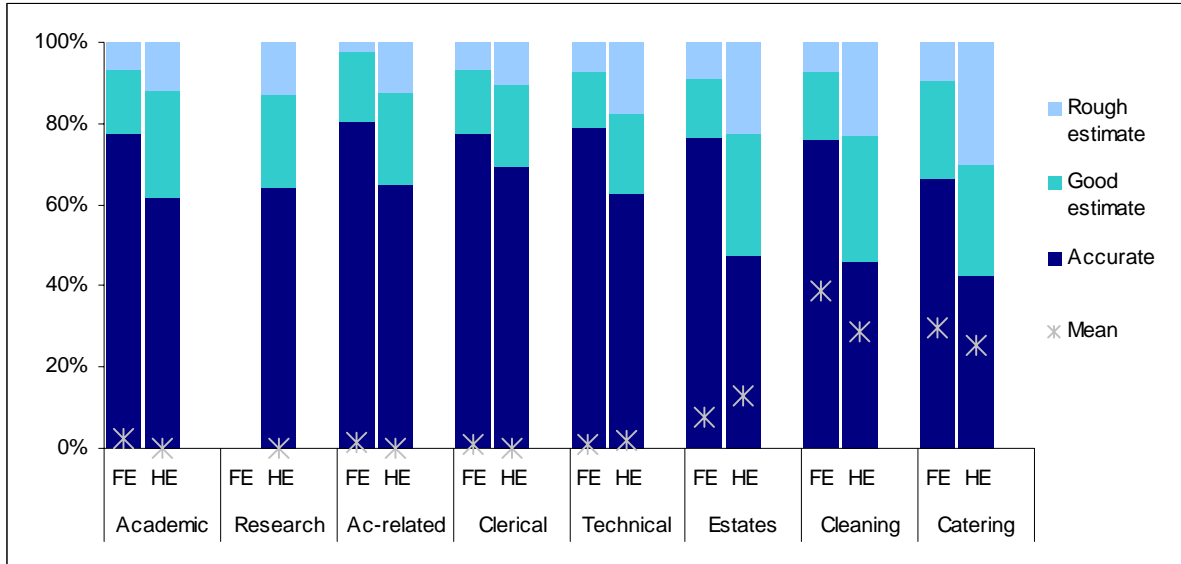
In terms of the accuracy of figures for estates and maintenance, catering and cleaning staff groups, the responding Further Education institutions were significantly more likely to state that their responses were more accurate than their HE counterparts. This is particularly true with regard to cleaning staff, where the difference between FE and HE responses is significant to the 1% level.

4.2.8 Staff without access to a networked PC in the workplace

Respondents were also asked to supply the proportion of staff within each group who do not have access to a PC in their workplace, again stating whether figures are accurate, or a

good or rough estimate. Figure 8 shows the mean proportion of staff in each group without access to a PC. Again, the mean proportions must be treated with caution as some of the contributing figures are estimated.

Figure 8 Staff without access to a PC



With the exception of estates and technical staff, staff in Higher Education seem less likely than their FE counterparts to be without access to a PC. However, no statistically significant differences were found between the staff groups of each sector. In both sectors, lack of access to computers is most pronounced in catering and cleaning staff groups. In some cases, respondents said this was because cleaning (6 HE, 6 FE) and catering (3 HE and 7 FE) functions are outsourced – the implication being that it is the responsibility of the contractor to communicate with these staff.

Attitudinal issues were also raised by some respondents, who felt that some staff (for whatever reason) may not be motivated to use PCs, even if they are available. Comments from HE included:

It's unlikely a tractor driver would want to bother to come into campus - or indeed any other university building - to use them. More likely to use from home/outside elsewhere.

All staff have access to PCs but a small number have not yet requested an account.

'There is access for all. We do have a few remaining diehards of course.'

'All staff have access to shared PCs in the Staff Development room, though this is exclusively used by Academic & Academic-related Staff.'

'All staff have the ability to access the network and ICT facilities but those who are involved in physical rather than desk work tend not to do so'.

Conversely, the attitudes of those responsible for IT provision may also play a part in determining which staff have access. As one FE respondent claimed:

'Cleaners don't need computers, catering people don't seem to want them because even when supported and helped they do not use them and anyway their hours of work are very

closely aligned to catering opening times so there is no real time for other than their own job which doesn't require the use of a computer.'

Another asserted: *'Only the Catering Manager requires access to IT'.*

4.2.8.2 Accuracy of figures

Again, FE respondents were found to be significantly more likely to state that the figures for estates and maintenance, catering and cleaning staff groups were more accurate than their HE counterparts.

4.2.9 Dissemination of corporate information to staff without computer access

Respondents were asked to give details of how information is disseminated to staff who do not have access to a networked PC. The responses are summarised below (Figure 9).

Figure 9 Means of dissemination to staff without computer access

Means	Further Education		Higher Education	
	No. of respondents (n = 54)	%	No. of respondents (n = 50)	%
Hard copies / memos	23	43%	26	52%
Face-to-face/staff meetings/briefings	22	41%	20	40%
Newsletters/ bulletins	15	28%	7	14%
Notice boards	7	13%	11	22%
Other means	5	9%	7	14%

Note: Percentages do not total 100, as many respondents cited more than one means

Other means included:

Further Education: Staff handbook, staff conferences, posters, induction, home email.

Higher Education: Payslips, responsibility of contractors, luck, via 'the grapevine', departmental arrangements.

4.2.10 Delivery of teaching materials via networks

83% of responding FEIs and 91% of HEIs said that they use networks to deliver substantial amounts of teaching materials, for example, via a Virtual Learning Environment (VLE). The difference between the level of use in FE and HE was not found to be statistically significant. It is worth noting that all of the five HE institutions not making teaching materials available via networks are small, specialist institutions.

4.2.11 ICT training

83% of FE and 74% of HE respondents said that ICT training is made available to all staff groups. Of the 22 institutions where training is not made available to all staff groups (17% of FE respondents and 20% of HE respondents), this largely applies to estates, catering and/or cleaning staff.

Some respondents supplied brief details about staff training when discussing current ICT initiatives. In addition to training courses, examples from FE respondents included:

- IT drop-in sessions
- Mandatory IT training for teaching staff
- Dedicated ICT training day
- ICT skills assessment as part of appraisal and/or induction
- 1:1 ILT training
- ECDL qualification offered free to all staff
- Establishment of a 'learning lab' for staff to promote experimentation with technology and roll out more formal ICT training.

Examples from HE respondents included:

- Dedicated annual ICT training events
- Offering staff development opportunities to specifically estates, maintenance, cleaning and catering staff
- Appointment of in-house/fulltime IT trainer
- Review of sessional staff induction and training
- Awareness weeks for new systems/software.

4.2.12 Initiatives to improve staff access to ICT

Significantly more FE respondents (81%) said they currently had initiatives to improve staff access to ICT, than the 54% of HE respondents (statistically significant at the 1% level). Respondents were also asked to give details of any initiatives. In FE initiatives predominately featured the provision of staff training and/or making laptops available to staff, particularly teaching staff. Other examples included:

- Wireless networking and remote access
- Home computing initiatives and making redundant college PCs available to purchase
- Capital spending initiatives
- Improving IT Support function to improve reliability and fix times
- 'Hot desking'
- IT Support department restructured to remove focus from technical support towards user support
- Reviewing IT access in staffrooms.

However, one respondent commented:

'Until and unless finance becomes available it is beyond our ability to provide more computers for staff - we will always supply more computers to students before we give staff computers.'

In Higher Education, the focus was also on ICT training. Other examples included:

- Wireless networking and remote access

- Provision of PCs in shared areas, e.g. cyber cafes, 'kiosk' PCs, staff rooms, part-time staff lab
- A long-term strategy to make most network resources available 'off the network'.
- New posts covering information architecture (including development of taxonomies and metadata) and records management – to make information more accessible
- Provision/loan of laptops in place of desktop PCs.

In contrast with the overall response from FE, a degree of complacency was voiced by several HE respondents, one of whom stated: *'We are at optimum'*. Similar comments included:

'[There is] not an overt initiative as doesn't seem to be needed'.

'Access to ICT by all types of staff doesn't seem to be an issue here - it's not that some people might not like it who don't have (much) of it, but from the institution's point of view it has been a long time since I have heard that 'x can't get the sort of PC they need' or 'I never heard about that...'.'

The latter comment contrasts with the response of one FEI, who said:

'I feel the lack of complaints about access within my institution indicate the need for greater staff training and I am about to put together a cross college training scheme for both academic & support staff I expect that the demand for physical access will then increase.'

4.3 Case studies

The research team received offers to act as a case study site from 25 Further Education Institutions and from 15 Higher Education Institutions. This therefore enabled the selection of six institutions from a wide range of geographic locations and sectoral positions. In addition, once the selection process had taken place, the research team were pleased to meet with a very encouraging and helpful degree of co-operation from the institutions concerned, and in particular from the named contact who facilitated the site visits.

In total, 35 personnel across the six institutions were interviewed. The interviews were typically conducted individually, but in a few cases, two or more personnel were interviewed together.

The presentation of findings is organised by case study site, in order to highlight the individual characteristics of an institution, the particular local circumstances in which it operates, and the nature of any specific initiatives that are happening within the institution. Further Education Institutions are considered first (arranged in alphabetical order) followed by Higher Education Institutions (again ordered alphabetically). The implications of these findings are discussed in the report's conclusions.

4.3.1 Causeway Institute

4.3.1.1 About Causeway Institute

The Causeway Institute is located on two campuses in Coleraine, Co. Londonderry and Ballymoney, Co. Antrim. Offering predominantly Further Education, with some provision of Foundation Degree programmes, it has around 1,100 full-time students and 7,600 part-time students. There are approximately 75 full-time teaching staff, 100 part-time teaching staff,

and 100 Corporate Services staff. The Institute came into being in 1994 from the merger of two former technical Colleges and respondents described it as a small college. However, as part of the reorganisation of Further Education in Northern Ireland, the Institute now faces the prospect of amalgamation with another two colleges, which will create a much larger entity.

Central administration for the whole Institute is currently based at the Coleraine Campus, where the field work was carried out. The ICT department is responsible for the management and support of the ICT infrastructure, and for the Institute's intranet and web pages. It is staffed by an ICT Manager and a support team of six staff across the two campuses. There are around 850 PCs for use by staff and students. The Institute's selection as a case study site was based primarily on its questionnaire response, which identified the Institute as having current initiatives in place to improve staff access to ICT.

4.3.1.2 The case study research

Eight members of staff were interviewed at the Institute over a two-day period. All the interviews were held singly. Interviews were held with the Assistant Director; the ICT Manager; the Personnel Officer; the ILT Co-ordinator and Champion; the MIS Manager; the Estates Officer; the Senior Caretaker; and the Key Skills Co-ordinator / Catering Manager. The research team were also provided with a copy of the Institute's ILT Strategy.

4.3.1.3 Communications Policy

There is no formal written communications policy for the Institute, although section 4.6 of the ILT Strategy addresses access to information, and notes that wherever appropriate the Institute *'will display documents in an electronic format'* and commits to improve the Institute's website. It also notes that the Institute email will be used to *'allow all staff and students to communicate with each other'* and to *'allow staff to convey private documents'*.

Two respondents noted that within the last three years the Institute had made progress towards the electronic dissemination of information, driven at least in part by the Department for Employment (DEL) and Learning E-learning strategy⁸. All respondents commented that email is now seen as the primary communications medium within the Institute, which was described as having *'very much an email culture'*. Email was regarded by some staff as having the benefit of providing an 'audit trail' of past communication. There is an 'all-staff' email list which is not controlled, but respondents did not feel that it was abused or that it led to an overload in email communication (although spam was identified as a problem). In addition to email, a wide range of other means of communication are used, including verbal communication (via telephone or face-to-face informal communication and meetings); hard copy written communications such as memos and letters; the VLE (Blackboard); notice boards (including putting staff notices on the fridge in the staffroom!); and the Intranet. It was the opinion of at least one respondent that *'there is still a lot of verbal communication within the Institute'*.

A lot of work on the part of the ICT Manager had gone into developing the Institute's intranet and website, in particular its Freedom of Information website (<http://vle.causeway.ac.uk/foi/>) which is available internally and externally. Driven by the requirements of the Freedom of

⁸ Department for Employment and Learning (2006) *E-learning Strategy for the Further Education Sector*, Belfast, DEL. Available at: http://www.delni.gov.uk/elearning_strategy_for_fe_sector.pdf

Information Act 2000, this is intended to be the primary location for storing information and policies, and all staff had received training on how to access documents on it. Although the intranet was described as being generally easy to use, several respondents noted that staff did not make much use of it. This was attributed to a range of factors including low levels of awareness about what it contained; a lack of enthusiasm generally for electronic communication, especially among older personnel; and a lack of material relevant to staff being on the intranet (which was seen as being of more relevance to students). The low usage of the intranet might also be in part a result of the ease of getting alternative access to hard copy: this was described as being just a matter of picking up the telephone and requesting a copy. Indeed, a recently produced staff handbook had been disseminated to all staff in hard copy, but staff who were interviewed were uncertain as to whether or not it could be found in electronic format on the intranet.

4.3.1.4 Staff access to computers

The Institute's ILT Strategy commits to ensuring that full-time and part-time staff have *'sufficient access to computers and associated services to enable them to be comfortable with the use of ILT'*, to working towards providing a ratio of computers to permanent members of teaching staff of 1:1 (this target has already been achieved); of maintaining access to the Internet and email services for every member of staff; and for providing each member of staff with access to an ILT adviser. They have benefited from funding from DEL so that most full-time teaching staff now have their own laptop, and teaching rooms are well equipped with ICT and audiovisual facilities. They also have laptops available for loan to staff and students. Part-time teaching staff who work during the day have access to shared PC facilities in an office or in the Learning Resources Centre. In addition to exceeding the guidelines laid down by DEL for PC ratios for students and staff, they have a three-year PC replacement policy. Older PCs may be redeployed to staff who do not require high specification PCs, such as technicians; alternatively, they may be auctioned to staff for personal use at home for £30.00.

According to the Assistant Director, there are no staff groups without access to ICT if they want it. Open access facilities are available to all staff irrespective of role or position and all staff are entitled to be issued with a user account and an email address. However, this is not an automatic process linked to the personnel system: when new staff join the College, their Head of School will email the details to IT support. In reality this tends only to happen in the case of staff who need access to IT for their job, although all staff may request an account from IT support. There is a dedicated PC on both campuses for the use of catering staff, and caretaking staff also have access to a PC in their work base. However, it was also acknowledged that whereas teaching and administrative staff expect to use ICT, catering and caretaking staff are more likely to be apprehensive about such use, and cleaning staff will not usually see the need at all. For these staff, there is a reliance on line managers to filter information down. This takes place by a combination of face-to-face briefings, regular team meetings and printing-out of emails and documents to pass on to staff. At the institutional level, computer use by manual staff is seen as a valid use of time: there is recognition of the need for all staff to communicate and to use computers, particularly as more processes become computerised. This view was validated by the Senior Caretaker who commented that he would be supported if he wanted to use a computer more than at present, although making time for training is always difficult when you are in a role where you are *'always in demand'*.

Part-time teaching staff based in community outreach centres, such as hospitals, also have difficulties gaining access. The Institute is aware of this issue and the Community Education Unit works especially hard to keep in touch with these staff. However, it can impose a limitation on their ability to use online teaching and learning resources. Another group of staff with whom communication can be difficult are those who teach only in the evening. Where necessary, they will post hard copy information directly to the staff member's home address. If staff have their own PC facilities and internet connection at home, they can access the College email service and intranet from home (although it was noted that this can lead to problems with work-life balance).

4.3.1.5 ICT skills levels and training opportunities

The Institute has a 'totally inclusive' staff development policy in line with its Investors in People accreditation, and respondents reported the staff development programme as being excellent. All line managers are encouraged to submit proposals for staff development to the Assistant Director who will cost and prioritise them in line with organisational objectives. However, some line managers are not as proactive as others in submitting proposals. This is particularly true of those in service departments. There is still a need to address basic ICT skills training, but personnel in functions such as cleaning and catering do not always recognise this need (*'they will find ways of opting out'*). An initiative to provide training for cleaning staff was not very successful as there was limited take-up. It may be that more attention needs to be given to advertising the availability of training: a member of estates staff, for example, did not appear to be aware of the opportunities provided. However, it is clear that the Institute recognises that ICT skills training across the institution is a priority because of the increasing reliance on e-communications.

The skills levels of teaching staff also vary considerably, and can inhibit some members from making full use of the VLE. Again, the Institute is aware of this issue and is working hard to close the gap. The ILT Strategy committed the institution to helping all teaching staff achieve ILT Skills Levels 2 and 3, but although this had happened, staff who had not subsequently made much use of the acquired skills had not always retained them. Internal training courses are available and staff can apply for support to take external courses such as ECDL. They have appointed an ILT Champion in each of the Schools, and this focussed approach has resulted in increased attendance at training sessions. However, the ILT Champions are given only one hour a week to devote to this role and this is not seen as adequate. Time constraints limit the opportunities for staff development. There is, however, a strong culture of peer mentoring across the institution, with colleagues assisting each other in acquiring skills: this happens with teaching and corporate services personnel. For example, a member of caretaking staff who had gained advanced ICT skills in a previous job had been instrumental in helping his current colleagues to use ICT. With regard to formal training sessions, part-time staff are paid for their time attending training where this is recognised by their line manager as being of relevance to their role.

There is no generic skills requirement across the Institute, although skills levels are taken into account when recruiting new staff. Induction is carried out by line managers, and the majority of job-related training takes place on the job.

4.3.1.6 E-Learning

The Institute's commitment to extending the use of e-learning is clearly elucidated in the ILT Strategy which states that, where appropriate, ILT will be used to enhance the delivery of teaching both in and out of the classroom. They are working hard to embed ILT into the

curriculum using a blended learning approach, but acknowledge that some academic areas lend themselves more easily to this approach, whereas others tend to favour a face-to-face approach. This is recognised as a challenge for the College. After initially adopting the Virtual Campus software platform, they have now moved to Blackboard as their VLE platform, but take-up by teaching staff is slow. Although some staff have been very enthusiastic (for example, there is now a lot of key skills information available to students through Blackboard), they find it hard to encourage some older staff, who cannot see the benefits of investing their time and energy in e-learning. However, the VLE is popular with students and integration with other systems (such as the student records system and the library management system) will enable the streamlining of administration processes.

4.3.1.7 Communication challenges

It is recognised by the Senior Management that the introduction of new technology can provoke apprehension, and this certainly appears to be the case for some older staff in the Institute, particularly for those whose roles are not seen as being computer-based.

Information overload is also recognised as a problem, and the immediacy of email creates its own problems. One respondent commented that with the expectation of a prompt reply, there is a risk of missing the opportunity offered by more traditional written communication to reflect and think through issues before replying. Apart from commercial spam, overuse of email was not generally seen as a problem by respondents and there was recognition of the need to attend to the creation of *'the right culture for e-communication'*.

A specific communication problem that was identified by the MIS Manager was the difficulty in getting timely and accurate information on student class attendance. This is of crucial importance as it has a direct impact on the funding that they receive. They plan to use e registration in order to overcome this problem, but she anticipated initial problems in getting this up and running as *'some staff don't like using PCs'*.

Another challenge facing the College is that of technical limitations to the link with the Ballymoney campus. This is recognised as being slow, but the cost of upgrading the link is considered prohibitive. Therefore staff at the Ballymoney campus receive a slower internet service than those at Coleraine, and opportunities to benefit from advanced applications, such as videoconferencing, are constrained.

Although respondents generally rated the effectiveness of communication at the Institute as being very high, there were some instances identified where communication from the Senior Management Team had not been as comprehensive as they would have liked, thus *'allowing the grapevine to take over'*. This was particularly true with regard to the forthcoming merger (see 4.3.1.8 below) and to reductions in funding levels.

The ICT Manager foresees that in future all staff will require computer access as more processes become computerised (e.g. the use of electronic timesheets) and new opportunities to improve the efficiency of processes will be presented (e.g. the use of CCTV by security staff). However, the challenge that they envisage is to manage this process in a way that does not lose the personal touch and that does not create issues of digital *'haves and have-nots'*.

4.3.1.8 Forthcoming merger

As a result of the reorganisation of Further Education in Northern Ireland to create six large colleges from the merger of the current sixteen smaller colleges, the Causeway Institute is anticipating merger with another two colleges. This will require high-speed communication links to be installed between the new college sites and will raise issues of interoperability. They expect to bid for capital funding from the government in order to finance this transition.

On a more personal basis, the ICT Manager identified that the merger will require the establishment of a 'trust' relationship to be built between the different parties to the merger. He envisaged other impacts of the merger on communication as:

- The intranet will assume greater importance in the merged institution;
- The volume and bulkiness of email communication may become too large and unwieldy, so that they will have to put more notices on the intranet instead of relying on email;
- The current reliance on face-to-face meetings and traditional notice boards will be difficult to sustain;
- There will not be a problem with the Freedom of Information website as the sources will be hosted centrally;
- In the larger, merged institution there will be a need for some kind of content management system to enable certain individuals to add content to the intranet.

The challenge of aligning three different institutions, each with their own established policies, ethos and technical infrastructure will be significant.

4.3.1.9 Implementation of an e-finance system

As part of the strategic move away from paper-based communication, the Institute has recently implemented an e-finance system. However, this move has triggered some concerns on the part of estates staff, who believe that the need to raise orders on the system prior to purchasing resources may affect their flexibility to respond to problems. For example, the identification of a health and safety hazard may require an instant response. At present, they are able to act without delay: there is some concern that the need to raise a purchase order on the system might impair this flexibility. In addition, although estates staff have received training on the new system, the old system of requisitions is seen as being much quicker to implement by those unfamiliar with the new system.

4.3.1.10 Other initiatives

Another initiative that is intended to promote the move away from a reliance on paper-based systems is the recent implementation of electronic Independent Student Learning Agreements (ISLAs). These are being phased in gradually as it is recognised that it represents a major change in work methods for teaching staff. The introduction of the electronic ISLAs is being accompanied by training sessions for staff and students. The system will allow Course Co-ordinators to have online access to student details such as their results on the initial entry skills tests. Students will also be able to update their own details. There are also plans to make academic reports available online.

Another new electronic initiative has been the introduction of student ID cards: this has saved the collection of data on paper and subsequent printing out of cards.

There are also plans to offer staff online access to NICIS, the College management information system. At present, staff are unhappy that they have to input data online, but still have to do a paper search for information on individual students. As a result, some teachers maintain their own databases because of lack of access to the main database.

4.3.1.11 Summary

The Institute has made significant progress towards its strategic aim of moving towards an electronic information environment. This has, at least in part, been driven by government strategy and funding initiatives. Email is now fully embedded as a communication medium, although use and awareness of the intranet appears to be more constrained. Within the Institute, there was much evidence of an enlightened approach to promoting inclusive access and training opportunities, with full recognition given to the needs of all staff groups. Access to networked PCs and to college systems is generally not an issue, although a small number of community-based tutors face difficulties in this area. However, it is clear that there are difficulties in terms of full staff engagement with electronic information. This is particularly the case with respect to manual staff, but also appears to be true of a proportion of teaching staff. Whilst staff appear happy with the informal, personal nature of much communication within the Institute, the reliance on such communication may be difficult to sustain once the Institute becomes a much larger, amalgamated organisation.

4.3.2 Lauder College

4.3.2.1 About Lauder College

Lauder College has a central campus in Halbeath, Dunfermline, two further large campuses, and a large number of community learning centres and employment and enterprise centres distributed across the West Fife region. They also provide educational services to prisoners detained whilst they serve their sentences at five of Her Majesty's Prisons. The emphasis of programmes delivered by Lauder is on work-force development, business and professional learning. The College maintains between 1300 and 1400 PCs for the use of staff and students. ICT systems and support for the College is the responsibility of the ICT Manager and his team.

The College was selected on the basis of its questionnaire response, in particular its initiative with regard to the drafting and implementation of its very comprehensive ICT Pervasiveness Strategy.

4.3.2.2 The case study research

Six members of staff were interviewed at the College over a two-day period. All the interviews were held singly. Interviews were held with the ICT Manager; an E-learning Co-ordinator; the Development Quality Manager; the Senior Human Resources Advisor; the Staff Development Manager; and the Facilities Co-ordinator. The research team were also provided with a copy of the Institute's ICT Pervasiveness Strategic Plan 2002-2005.

4.3.2.3 Communications policy

The ICT Pervasiveness Strategy, originally drafted in 2002 and subsequently updated, is an example of the forward-thinking approach to the use of technology that is demonstrated by the College. The document outlines strategic directions, objectives and targets for the development of ICT infrastructure and networks; e-learning; online learner support services; e-business development and staff development. Its original driver was to make internet and email available to all staff and students, and to bring together a number of different initiatives

taking place in different departments. The focus of the Strategy remains on increasing the use of ICT rather than on security or acceptable use.

Strategic directions in the area of staff working practices and staff development contain a commitment to:

- Develop further the culture of using the Lauder College Group websites and intranets as the primary source of information, documentation and knowledge;
- Redesign the staff intranet as a portal for all staff to access the information, knowledge, documentation and tools they require to carry out their jobs effectively;
- Enable staff to access staff development and training opportunities, where appropriate, from the desktop via the staff intranet and the VLE;
- To create a staff development framework that maps ICT skills requirements to jobs and working practices and staff development opportunities;
- To offer a range of Professional Development Awards (PDA) to assist staff to continue to develop and apply ICT skills to their learning and teaching practices and to their working practices.

Initially, the move towards increased use of the intranet as a source of information had met with some resistance, but user feedback and usage figures suggest that it has become much more firmly embedded. In a staff ICT questionnaire undertaken by the College, just over 50% of the responding staff said that they use the staff intranet everyday, and a further 25% said they use it more than twice a week. Although some documentation may also be available elsewhere, all key documents are accessible via the intranet. As material on the intranet has become more accurate and up-to-date, and more interactive services (such as online events booking and fault reporting) offered, usage has increased. The Staff Development team took a proactive approach to developing their intranet area, believing that by changing practice it is possible to change culture. They were an early adopter of an electronic booking system for staff development events, and have found that it has reduced their administrative burden considerably. In the facilities management area, online fault reporting has also led to considerable time saving and the provision of a faster and more accurate service. Evaluation suggests that more than 50% of staff prefer to use the email or intranet to report problems than the previous system. When new information is added to the intranet an email alert is sent round. It was acknowledged that it can be difficult to find some documents on the intranet and that therefore work remained to make it more accessible. The development of the intranet is perceived by the ICT Manager as an iterative process based on regular self-evaluation and user feedback.

Paper-based materials are now being replaced with electronic materials, although initially the two formats ran in parallel. While most staff regard electronic document availability as a good thing that enables better document control, some will instinctively print out documents and refer to out-of-date material. The staff handbook is now distributed in electronic format only and staff are required to return all hard copy versions held. They are also required to sign to say that they have access to the electronic version on the intranet. As part of the induction process, new staff have to explain where the handbook is on the intranet, and sign that they have seen it. The Health and Safety manual is also no longer being produced in hard copy, and the Learning and Teaching Toolkit is now delivered completely online. The

ICT team have found that encouraging a culture of using electronic documents has been more challenging than making the information or the systems available. Nevertheless, respondents reported positive perceptions of the intranet, and one commented that *'Information provision in the College is about as good as it could be'*.

4.3.2.4 Staff access to computers

All members of College staff have some access to ICT although contracted staff such as cleaners are not provided with access. Over recent years the ICT team have tried to tackle access for specific groups identified as disadvantaged. As soon as someone is employed by the College they will be issued with a password, user account and email address. The College has met its target ratios with regard to PCs to staff of one PC per full-time member of staff or per three members of part-time staff. Difficulties posed by specific locations (e.g. geographic isolation, old buildings or prison environment) are now more of a constraint than lack of budget. Five or six years ago bandwidth and speed of connectivity between sites had been a challenge, but broadband access to the larger sites means that this is no longer the case.

Estates and property staff have access to networked PCs: this was driven by the move towards an online Facilities Management System (*see 4.3.2.8 below*). However, seven property assistants share one relatively low-specification PC: this was acknowledged as inadequate. Upgrading of equipment is being planned. More senior staff have their own PC. Facilities staff now need access, and therefore issues of whether PC use is a valid use of their time do not arise. Indeed, estates management encourage the use of IT. The Facilities Co-ordinator was not sure of the extent to which all facilities staff, such as technicians and property assistants, made active use of the intranet, but they did all use email. If necessary, they will go to the administration office for a hard copy of electronic information.

All remote College sites have some access to ICT, although one, the Methil Employment and Enterprise Centre, does not have access to the intranet. ICT use in learning centres in prisons has progressed greatly over recent years, but internet access is not generally available (though staff may have some limited access through the SPIN network). Vocational courses and work-based learning courses may require teaching staff to visit the workplace (e.g. motor vehicle repair centres) which may not be equipped with network access: this imposes restriction on staff use of ICT. They are investigating the potential of mobile devices to overcome this. Staff who do not come into College much, such as those who work at home, may have less access than other staff, although all staff with a home PC and internet connection have access to webmail and limited offsite access to the intranet. They also provide laptops for loan to all staff, but the perception tends to be that these are only available to academic staff and the uptake of them tends to reflect this perception. They currently have a working group looking at issues related to home access.

Although much information is not now routinely made available in hard copy, where they are made aware of specific difficulties encountered by an individual, such as visual impairment, arrangements are made to accommodate these. They have found that the time saved by online document delivery can be used better to meet the needs of those with specific difficulties.

4.3.2.5 ICT skills levels and training opportunities

The College's reliance on information dissemination via the intranet and email means that it is essential for staff to possess the necessary skills to use ICT effectively. The ICT

Pervasiveness Strategy states that ICT skills are relevant to all staff and they will fund all staff to do the ECDL: even the former Principal was seen to be undertaking ECDL. Staff development within the College was described as '*fantastic*', although some staff still need further encouragement to engage with it. Any ICT skills deficits are identified at Staff Development Career Reviews. Individuals requiring one-to-one basic training will receive it. This may include training on accessing the staff intranet and finding information. There is a strong emphasis on inclusiveness and the removal of barriers to access of information.

All new staff must undergo the induction process, in which new staff are shown how to use the intranet and the VLE. There is recognition that new staff who are employed from an industrial background or part-time staff may not have skills in information handling or familiarity with where to find information. New staff are required to complete a questionnaire about their IT skills levels, in order to assess their readiness for blended delivery of learning, and they use peer buddying to support those identified as having particular needs. They also provide training to improve skills in sifting, evaluating and using information: for example, they are trying to help people use information gateways. One difficulty is that a lot of teaching staff work only in the evening and may have other commitments during the day: it can therefore be difficult for them to attend induction sessions. They are trying to resolve this by piloting the use of induction materials available through the VLE, including learning materials that provide an introduction to the intranet. Staff who are identified as still having low level skills post-induction will be offered one-to-one coaching.

Sometimes there are problems with line manager resistance to staff spending time working on online induction materials. The initial induction workshops in which the VLE is introduced are held face-to-face. Staff are then required to follow this with online tasks, print material off and sign statements of understanding. Occasionally the line manager has not allowed any time for their staff to do this. Access to PCs is less of an issue: for groups of staff not required to use a PC in their daily job, they have provided a staff development resource area with PCs in the library. This was described as a successful initiative, which is used enthusiastically by some staff.

As skills levels have increased, take-up for ECDL has decreased. They are now focussing more on the specific IT skills an individual needs to perform their job effectively. They also tailor training for specific departments – for example, they provided entry level skills training for porters, conference and catering staff. However, the Staff Development team do not deliver training on specific departmental systems, such as the Facilities Management System: this was provided by the Estates Manager. The main challenge is seen as being that of motivation and encouraging people to want to improve their skills. Staff are encouraged to take ownership of their own Continuing Professional Development (CPD) via the use of CPD planners and logs.

However, although the move to deliver more staff development online has resulted in a reduction in administrative effort and they are able to reach more people, it has also caused some problems for those who do not have ready access to the intranet, for example those working in the prison learner centres. Many staff now have home access, but there is some resistance to undertaking staff development using their own equipment and time. For part-time staff, in particular, time for staff development is an issue: the College does not always have the resources to fund their time spent on staff development. Likewise, one of the more difficult groups to reach has been that of new lecturing staff from crafts

backgrounds such as the construction industry: they will not necessarily understand the necessity of developing ICT skills for their role as lecturer.

4.3.2.6 E-learning

The College uses its own VLE platform to deliver courses in blended and wholly online mode. The ICT Pervasiveness Strategy notes that at the College the use of ICT will be blended into all learning and teaching methods. They have been involved in e-learning for over six years. Although there was some initial resistance on the part of some members of teaching staff, this was anticipated and they had strategies in place to address it. These included the use of mentoring strategies and peer relationships to build confidence.

In the past, lack of access to ICT equipment in discipline areas that had not previously needed computer access had been a constraint. For example, the location of the Art and Design department was not suited to PC access: as a result, staff did not use PCs and therefore did not understand the need for ICT. However, such issues have now been resolved and there is a much greater understanding and acceptance of the importance of e-learning.

4.3.2.7 Communication challenges

As described in 4.3.2.4 above, the College has faced particular challenges with regard to the large number of distributed sites, often in locations that do not easily lend themselves to being networked. These have been addressed as effectively as possible, although inevitably some inequalities in access remain. They are investigating the potential of mobile technologies to improve access further. To date the project pilot has highlighted the fact that these technologies do not offer a direct replacement: they need to be made easy to use and have to be synchronised with other technologies. Mobile technology is expensive and many staff prefer desktops to laptops.

Another remaining challenge is the further integration of systems in order to improve information sharing: for example, lecturing staff do not currently have online access to student records.

The potential for the reliance on the intranet to lead to information overload was also identified as a challenge by one respondent, who noted that it is *'bulging'*: this may act as a deterrent to staff from using it. There is a need to ensure that information is properly prioritised in the light of its strategic importance. It is also important to ensure that staff, particularly those in operational functions, are given adequate time to use ICT during work time, or they may be deterred from such use.

4.3.2.8 Facilities Management System

The introduction of a new electronic Facilities Management System (FMS) 18 months ago had been a strong driver to improving the ICT access and skills levels of facilities staff. Prior to this, facilities management processes were paper-based. Although the project was still in its early stages, and had met with some initial resistance, the improvements in management reporting that it had enabled meant that most staff now appreciate the benefits that it offers.

The Facilities Co-ordinator, who is responsible for the implementation of the system, recognised the importance of the human factor in the success of such a project, and that the system was only as good as the information received: for example, inaccurate information would disable effective room booking. Similarly, while most people accept the fault reporting

system, which works well, there is still a tendency for some to report problems informally, for example when bumping into members of maintenance staff in the corridor. There is a need to educate staff that they must follow the reporting mechanism as property assistants use it to get their work lists.

The main drawback to the system is the reliance on the technology working: if the system is down for any reason, they do not even have access to their task lists.

In addition to management reporting, the system is useful for providing information with regard to routine maintenance cycles, electrical testing requirements and legal compliance. Although the time investment required initially to get the system established and to train staff in its use means that they have not yet seen real time gains, they have already benefited from the access to better quality information. They also use only a quarter of the paper previously consumed.

4.3.2.9 Other initiatives and developments

The College is in the second phase of implementing a campus-wide wireless network. In addition to further increasing the flexibility of ICT access, this will enable them to move to real-time reporting of class attendance: at present, class registers are still paper-based.

4.3.2.10 Summary

The scale and distributed nature of the College's premises and operations have presented the ICT team with particular difficulties in extending the use of electronic communications and in ensuring equitable access to ICT. However, it has also meant that they have had much to gain from the use of ICT. The planning and vision that went into the development of the ICT Pervasiveness Strategy have resulted in considerable success in extending the use of ICT and providing widespread access to its benefits. Use of ICT now appears to be fully embedded across the College, and they are starting to reap real benefits in terms of information quality and efficiency of service. The focus on evaluation, user feedback, peer mentoring, staff induction and staff development have enabled them to overcome much of the initial inevitable staff resistance.

4.3.3 Loughborough College

4.3.3.1 About Loughborough College

Loughborough College is a medium-sized Further Education college in North Leicestershire. It shares a large campus with Loughborough University and the Royal National Institute for the Blind College. As part of its strategy to widen participation, the College has opened a number of community-based centres in Leicester and North Leicestershire. These include an internet café, NetSP@CE, in the Loughborough shopping centre, which claims to have been the first 'UK Online' training facility to open in the UK. The College offers a broad range of qualifications at all levels up to and including Foundation degrees. The College is structured into self-directed curriculum and business support delivery teams, each with a Team Leader. Managers have a cross-college strategic role, as well as, in most cases, a role to support and coach the teams. [Source: Loughborough College website 'Who we are' available at <http://www.loucoll.ac.uk/foi/publications/Introduction4.asp#who>].

The College was selected as a case study site primarily on the basis that it has a well-developed Electronic Communication Policy in place.

4.3.3.2 The case study research

Four members of staff were interviewed at the College, spread over a two-week period. All the interviews were held singly. Interviews were held with the Learning Resources Manager (responsible for the Learning Resource Centres and Computer services section, including management of the College network, website, intranet, software applications and telephone system); the ILT Champion and Team Leader for the Teacher Development team; the Knowledge Systems Manager (who co-authored the College's Electronic Communication Policy); and the Staff Development Manager. The research team were also provided with copies of the College's Electronic Communication Policy; Staff Leavers Electronic Data Policy; and Staff Computer Users Policy.

4.3.3.3 Communications Policy

The Electronic Communication Policy has been in place since March 2004, and sets out clearly the different purposes and context that govern the use of different forms of electronic communication within the College. This includes the use of staff email lists, the intranet, discussion forums and curriculum websites. The main driver for the policy had been the increase in electronic communication and the associated need to provide guidance for staff, together with a recognition that important information was not reaching all staff. There is no equivalent policy for hard copy information.

In order to reduce the volume of staff email in circulation within the College, they have recently introduced a new initiative that uses a 'weekly alert' made available on a shared drive each Monday morning to Managers and Team Leaders. This contains key information *'that staff really need to know'* for the week ahead, including items for action, dissemination or information. Managers and Team Leaders are responsible for briefing all team members, including sessional staff, *'in whichever way is most appropriate'*. This responsibility was communicated via a written directive from the College Principal. All staff may submit items for inclusion in the next alert, but only a small number of staff may send all-staff emails. Preliminary positive feedback has been received from Team Leaders with regard to the weekly alert system, although the need to promote its use further is acknowledged. The Principal has put his name to an email promoting the alert, and this is seen to be important.

According to the Teacher Development Team Leader, Team Leaders use a range of communication methods to disseminate this information, according to circumstances and the nature of the team. They use some face-to-face communication, but sometimes they have a lot of part-time sessional staff who only work in the evening. It may be possible to communicate with them only via email. The Principal encourages the use of team briefings, which draw on materials from the weekly bulletin. Briefings are considered to be especially important for staff without easy access to PCs. Although the use of weekly team briefings is not a requirement at present, they are considering making it mandatory. Meetings also take place further up the chain, in order that information flows upwards as well as downwards.

Other news and information, such as events and staff appointments, are delivered through an online newsletter, E-Rover, and there are discussion forums that allow staff to post general non-college messages, such as items for sale. These are also available for particular groups of staff or in relation to particular areas of work, such as ILT. Readership of E-Rover is not very high, so they have started to print copies out and circulate them via the staff room: the Learning Resources Manager commented that *'This is particularly helpful to estates and some teaching staff, who do not have easy access to IT'*.

The staff intranet is set as the default homepage on staff PCs, and is the definitive source of college published non-curriculum documents other than learning materials: this includes policies, forms, the staff directory and minutes of cross-college meetings. A list of new documents is included on the front page. It was redesigned a couple of years ago, and meets with a mixed response. Some staff claim to have difficulty finding information on the intranet – although the search function has been made easier and there is an A-Z directory of contents, the fact that it contains over 900 documents does cause problems.

Paper copies of policies are also given to new staff and students, and are available to be picked up around the college. This year they are considering sending copies of policies to staff via the internal post. Hard copy of important items, such as legal information, is sent to staff attached to payslips.

They also use 'information screensavers' to draw attention to important or urgent news items for staff or students. This has been very well received, with staff reporting it as '*a brilliant idea*'.

Although electronic communication is widely used across the College, it was noted that it has not led to a huge reduction in the use of paper, except in the case of memos and drafts. The College was described as still being paper-heavy on the teaching side.

4.3.3.4 Staff access to computers

The Staff Computer Users Policy states that all staff are entitled to use College computers as part of their work, and are encouraged to do so. The College aims to have a PC on every desk. Currently the ratio of PCs to full-time equivalent members of teaching staff is around 1:3, and they are hoping to increase this to a ratio of 1:2. The increase in the use of ILT and in the use of internet and email communication makes this an imperative. A limitation is the availability of space and desks.

In the past there had been issues with tutors not having their own PC, but full-time tutors increasingly have their own PC. Part-time tutors share PCs. Access is improving all the time, particularly with the rise in numbers of staff with home computers. The use of ILT has led to a greater demand for PCs and for home access, but laptops are expensive to provide. Staff are able to purchase (new) PCs for home use through an interest-free staff scheme based on salary deductions. This has proved very popular. Staff can also use the computers in the Learning Resource Centres. Staff with their own home computer and internet connection can access the intranet and the College email service from home: this has reduced pressure on the College PCs.

Team Leaders and Managers all have their own PC, as do business support staff (i.e. those working in Personnel, the Registry, the Learning Resource Centres, the Finance Department etc.). The use of computerised systems in these areas requires such provision. Staff who are not based at the central Loughborough site were reported to have equal levels of access to those at the main site.

Cleaners and casual staff have problems with access: only supervisors have computers. However, there are a few computers in the staff lounge which any staff can use. Whereas other staff will be issued with their username and password on entry to the College, the onus is put on some manual staff to apply for these. Although cleaning staff have been given extensive basic skills training, and are '*very keen on training*', the turnover of staff in

this area is high. One useful initiative has been to give cleaning staff priority for the purchase of redundant College PCs for home use. Another group of staff who experience problems gaining access to a computer are those who work in the nursery. The Estates Department use an electronic fault reporting system, managed through an administrator, and all estates staff have email addresses (although they may not all make active use of them). There does not appear to be an issue with regard to line managers' attitudes towards manual staff using PCs in work time: it is recognised that PC access is essential to all staff. However, there may be a degree of *'inverse snobbery'* in a small number of staff, who do not have the skills or do not want to use computers, *'but are proud of it'*.

Computer replacement and purchasing is written into the capital plan. Some staff PCs are purchased from a central budget following a survey of staff areas, whereas others are purchased directly by individual teams. This has led to unequal provision across the College. There is a four-year rolling replacement programme for student PCs and a five-year programme for staff, driven primarily by the requirements of software and systems upgrades. Computers for staff are 'cascaded', such that departments with lower requirements (e.g. estates) receive older computers from other staff members.

There is a yearly staff perception survey undertaken at the College. This has led to comments being received about there not being enough PCs in the staff room, but on investigation it had been apparent that at most times there are PCs there that are not being used.

4.3.3.5 ICT skills levels and training opportunities

Mandatory induction sessions for new staff are being implemented, to be held every month. This includes a short introduction to use of the intranet and College email service. It also highlights how to access further training opportunities. They have recently appointed an IT Trainer, in part as a response to government strategy with regard to ILT training. The College will support staff through ECDL if they wish to work towards it. There is a Professional Development Review process which highlights training needs. There has been a cultural shift on the part of staff towards staff development, such that staff now recognise that they are entitled to training.

There is an online booking system accessible from the intranet for staff development, and this has led to an increased take-up of opportunities. However, it is still possible to book over the telephone, as the College recognises that a combination of methods is necessary to provide access for all staff. All training is open to all staff: it is down to the Team Leader as to what training can be undertaken in work time. Training is identified as 'essential', 'desirable' or 'not desirable'. IT skills would be considered to be at least 'desirable' for any member of staff, but training is not mandatory. However, new staff are required to have basic literacy, numeracy and IT skills.

ICT skills are an issue for some teaching staff groups, however this is primarily related to the creative use of ILT in the classroom. The ILT Manager described this as being more a matter of *'bringing them onside'*: he saw *'getting them to be able to do it'* as less of an issue. They have not taken the approach of stipulating that everyone must take a qualification, but have undertaken staff surveys asking staff to self-assess their own skills levels. They have asked staff to self-certify to the effect that their skills levels match the requirements of their job: if there are gaps, then they are offered training. They also hold drop-in sessions. This helps with the problem of staff who fear that *"I should know this but I don't"*. They have also

used 'best practice groups' and the pairing of Team Leaders. They have used a targeted approach towards teams with low ICT use, and will sometime nominate a 'Champion' within a team, who will be able to relate training to an individual's job. There is also informal training and mentoring that takes place within teams, and all teaching staff have a nominated mentor. They are working towards getting a networked PC and data projector in every classroom: the move towards e-registration has helped to push this forward.

Cleaning staff have received basic skills training as part of a national project to see how training works for staff who work unsociable hours. Staff were paid for the time spent attending. The training has continued, but payment is no longer available, although some courses are offered in work hours and during holidays. Cleaners are also able to use 'NetSP@CE'. The cleaning staff have shown a *'thirst for learning'*: the encouragement of the cleaning supervisor has been instrumental in this desire for training.

One respondent described the College as have a *'learning experience'* culture. Leadership from the top has played a critical role in this: the Principal was described as being *'very inspiring'* in encouraging staff to develop their skills and communicate effectively. This was also said of the Director of Corporate Services.

4.3.3.6 E-Learning

Around the beginning of 2004, the ILT Manager and the technical team, developed the College's own Learning Environment, the Curriculum Website, based on open source Content Management software. This is used to publish curriculum material such as assignments, timetables, and course materials. They hope to encourage the usage of ILT and to instil a culture of collaboration. The College is now moving towards adopting Moodle as a VLE platform. They are currently running a pilot with the Teacher Development Department. One problem that they have identified with innovation in ILT is that the early adopters tend to harness all the available support, and it then becomes difficult to maintain a similar level of support across the organisation.

4.3.3.7 Communication challenges

Access to information has really improved at the College, but they are aware of the continuing challenges they face with regard to file management, archiving and ensuring information is up-to-date. The ready availability of so much information demands more developed information handling skills. They are also aware of the dangers of information getting 'stuck' at certain levels within the College: the focus on team briefings is intended to ensure this does not happen.

Although the Principal is in favour of a 'paperless office' approach, some respondents felt that this is unlikely to be fully achieved in reality, as *'staff still like to work with paper'*. At the moment they recognise that a combination of methods may be necessary, according to the person and the purpose.

With regard to ILT, they have extended its use in the classroom but there is a wide range of subjects taught at the College, and some subject areas, such as hospitality and care, are less well suited to making full advantage of the benefits of ILT.

Staff time is an issue, especially as some staff spend very little time in staff rooms and find it easier to access ICT at home. This is particularly an issue for part-time staff, who may also have little interest in using email. They have found that quite a high proportion of part-time

staff do not use the College email or access the staff development resources: they maintain that they do not have the time and / or are not paid to do so.

4.3.3.8 Other initiatives and developments

There is a good integration between the various College systems, enabling single entry of data and pooling of data from a single source on a live basis. For example, the personnel database now feeds the college email address book.

They are looking at ways of personalising the learning environment, for example by making more use of SMS and mobile phones to communicate with them. They are also working at extending the wireless network. They are developing the use of e-registers, which they believe will help assist with student retention and achievement. Another initiative is the use of online portfolios for care assistant assessors.

4.3.3.9 Summary

The College's approach of 'cascading' information down through a carefully thought out process using different communications means as appropriate to the context, appears to have been largely successful in addressing the problem of email overload and ensuring effective communication. The combination of the weekly alerts and regular team briefings appears to maximise the benefits to be had from targeted and focussed electronic communication in combination with verbal face-to-face communication. The role of the Principal and his leadership on issues of communication appears to be of paramount importance in the success of this approach.

Use of the staff intranet as the primary document repository is posing challenges with regard to its size and searchability: it appears that this is constraining its use by staff. Access to PCs appears to meet demand for most, if not all, groups although this seems to be at least in part a result of a number of staff having home access. In this respect, the staff computer purchasing initiative appears to have been very successful.

There was ample evidence of an inclusive approach towards access to ICT and to relevant training opportunities for all groups of staff. The range of staff development approaches that are taken to meet the needs of all groups is particularly commendable. Nevertheless, some concerns remain with regard to part-time staff, in particular in terms of making time available for staff development. Similarly, cleaning staff appear to have very limited access to PCs: they may well not feel able to use a workstation in a general staff room, but would make use of a dedicated machine in their own work area.

4.3.4 University of Chichester

4.3.4.1 About the University of Chichester

One of the newest universities in the UK, the University of Chichester is a small university with two campuses in West Sussex: one in Chichester itself, and the other in Bognor Regis. Originating from a teacher training college that was founded in 1839 and which subsequently merged with another small College to become the West Sussex Institute of Higher Education, it received approval for the title of University of Chichester from the Privy Council in October 2005.

The University was selected as a case study site on account of its questionnaire response, which highlighted its adoption of the use of an institutional portal for information

management and dissemination. It also identified the fact that the University has drafted an Internal Communication Strategy. A final consideration was the fact that, as a new university, it had the potential to offer different insights from the other two (older) university case study sites.

4.3.4.2 The case study research

Five members of staff were interviewed at the University during the course of a single day. Some of the interviews were held jointly, and the Director of Information Services was present throughout the day. Interviews were held with the Director of Information Services; the Head of Planning and Campus Services; the Head of IT; the Head of Estates and Resources; and the Head of Equality and Diversity. The research team were also provided with a copy of the University's Internal Communication Strategy, and were given a demonstration of the University's information portal, 'Portia'.

4.3.4.3 Communications policy

Drafted by the Director of Information Services, the University's Internal Communication Strategy concerns general communications among and between staff at the University: communication between staff and students is not included. It lays down a number of principles for staff communication, including that:

- Good communication is essential to the efficient management and general well-being of the institution;
- All staff, at all levels, have a responsibility to communicate as appropriate with colleagues and students;
- Managers have a particular responsibility to ensure that their colleagues are well informed about the affairs of their department and of the institution in general;
- All staff have a responsibility to be communicated with, i.e. they should look regularly in the agreed sources of communications (email, Portia Announcements, Group pages, notice boards etc).

The latter principle thus recognises the two-way responsibility of the information relationship: as the Director of Information Services put it, '*Nobody has the right not to be communicated with!*'

The intention behind the drafting of the Strategy was to introduce some consistency into the various methods that were being used for communication in the University; to reduce information overload; and to ensure that everyone received information relevant to their work. The Director of Information Services believes that the Communication Strategy has encouraged staff to consider what is the best means for specific communications.

As part of this move towards a more consistent approach to information dissemination, the University implemented an information portal (Portia), delivered on the SCT Luminis platform. They were the first UK university to implement this particular product. Staff web browsers are set to default to Portia as their home page. The portal allows for targeted communication with groups rather than sending everything to all staff (or all students). The portal has an 'Announcements' feature which is used to disseminate information in preference to the use of all-staff emails: announcements can be general (i.e. it will appear on all staff screens) or targeted (in which case, only the relevant group will see it). New

announcements will appear on an individual's personalised portal home page. There is a University Calendar tool, which is used to list committee meetings and other events. Although it was acknowledged that teaching staff do not all make full use of Portia, and that email is still widely used, the portal has proved particularly useful to administrative staff for targeting communication towards specific groups or cohorts.

In addition to the use of Portia and of email, the University also uses newsletters (for example, The Principle's Newsletter, or those produced by individual schools) to disseminate information. These are all available electronically and in hard copy. Documents requiring regular updating, such as the staff manual, are made available electronically, but managers will print out hard copies for staff when required.

In recognition of the fact that electronic communication can be a problem for those with no computer, line managers are charged with responsibility for ensuring that information gets disseminated to staff who do not have ready access to a computer. Particularly important information is disseminated in hard copy attached to salary slips.

In addition to these channels, the value of face-to-face communication is recognised: the Head of Planning and Campus Services commented that, while electronic communication makes mass communication to 300 people much easier, he *'still likes to walk about and communicate face-to-face'*.

4.3.4.4 Staff access to computers

All staff have some access to a PC if they want it and ratios of PCs to members of staff are no longer considered an issue. All staff are issued with a University username, password and email account, but they have to activate it themselves after agreeing to abide by terms of the Computer Code of Conduct. Nearly all staff activate their account. Access is comparable at each campus. All full-time teaching and administrative staff have their own PC. Part-time teaching staff may have to use a group office or hotdesk, but they no longer receive complaints concerning lack of access.

According to the Head of Estates and Resources, over the last twelve months the University has made *'a real effort to make information available for professional and manual staff'*. Manual staff have access to training, and to a shared PC located in the Welfare and Accommodation Service. There is a workshop with an office facility, but only about one third of the 20 or so estates staff (building maintenance, grounds and security staff) have made use of it. Therefore, they still print out information and distribute it, either to individuals or via a notice board, depending on the priority of the information.

Provision for cleaning and catering staff was however recognised as being a problem. Office-based staff working on a permanent contract, such as the Catering Manager, have their own PC and this will be of a good specification. Casual office-based staff will not have their own PC, but will have shared access. However, there are between 20 and 30 contracted staff who do not have any access, and many do not have IT skills. Managers get round this by putting important notices, such as health and safety information, next to the book where staff sign in and out when they arrive at and leave work. Staff are expected to read the notices that are posted. They also meet with staff face-to-face in formal and informal meetings to communicate information. If staff do want to use a PC there is one in the office behind the kitchens, but *'they don't encourage them to do so'*. As the service is

contracted out, staff are not generally motivated to access University information and do not complain about lack of access to information or PCs.

4.3.4.5 ICT skills levels and training opportunities

The range of staff ICT skills levels was described as '*typical for any organisation*'. There is a staff development programme that offers a comprehensive range of ICT training and staff development is available to all staff. They have recently appointed an IT Trainer and are implementing an ECDL-based programme of ICT training.

The ICT skills of new staff are assessed at interview or induction and, for existing staff, the Staff Development Review will identify any specific training needs. In the past they had insisted that everyone had training before they could have access to an email account, but this is no longer practical. New staff will often be shown how to use the system by their colleagues. In addition, new staff are provided with information about how to find University policies on the intranet, and are also given a hard copy of the staff handbook.

The University was described as having a '*supportive culture*' with lots of development opportunities for everyone.

4.3.4.6 E-learning

The portal offers an e-learning platform with a range of applications designed to support student learning. In addition to facilitating communication with students, teaching staff are starting to exploit its potential for e-learning. This has been partly led by student demand for more active use of the e-learning platform, and partly as a result of staff starting to appreciate the benefits it offers. It has also been driven in part by the Learning and Teaching Strategy which supports this shift towards e-learning; and in part by the availability of internal funding to promote and facilitate innovation in e-learning. There are no barriers to entry for lecturers: all courses and modules have a home page created as standard, and there is a lot of support available to them if they decide to make use of the platform.

4.3.4.7 Communication challenges

Although the portal approach has met with some success in its aim of addressing information overload, there remain some challenges in making best use of the tools it offers. For example, the University calendar was intended for use to show internal events of all kinds, and they hoped that people would add details of forthcoming events. However, academic departments tend to have their own systems and although administrative staff enter committee dates, other staff tend not to add further dates to it.

Challenges remain with regard to gaining the full engagement of staff with the portal. One member of staff complained that one of his pet hates is to be told in response to a request for information that '*It's on Portia*'. His view was that staff put a document onto the system and then think that it has been communicated. Indeed, he commented that there are still some gaps in communication, and information is still not always cascaded effectively.

Some teaching staff also appear reluctant to engage fully with the opportunities offered by the portal. Communication with the 'Link Tutors' who monitor teacher training students on work placements poses some logistical challenges. They have tried to overcome these by setting up communication forums on Portia, but the tutors have not made active use of these.

The 24/7 nature of a portal has also caused some difficulties for the Head of IT, who noted that staff and students expect round-the-clock support for the system and for the networked halls, with no downtime for maintenance. Supporting staff home access is another issue that they have tried to address, but legal and insurance problems have prevented them from taking the matter any further.

4.3.4.8 Other initiatives and developments

The University is actively trying to improve 'bottom-up' communications. They hold twice-yearly open meetings with the Vice Chancellor, and have more recently established a virtual forum in which staff have the opportunity to question him.

They are also starting to experiment with other technologies such as telephone integration and IP telephony; SMS communication with students; and the potential uses of handheld devices such as Blackberries.

4.3.4.9 Summary

The development of the Internal Communication Strategy is evidence of the University's commitment to enhance the efficiency, effectiveness and inclusiveness of communication across the organisation. The implementation of the portal has facilitated more effective information management and more targeted and focussed communication. The recognition given to the responsibilities of staff not just to communicate but also to proactively keep themselves informed is particularly interesting.

It appears that, in general, access to ICT facilities is not a problem at the University, except for those staff who work for outside contractors. In their case, PC access is very limited although efforts are made to ensure that they have alternative access to relevant information.

Overall, it would appear that the main challenge for the University is not so much a case of increasing access to technology, training or information as in '*winning the hearts and minds*' of staff to the extent that they want to make full use of the available opportunities.

4.3.5 Loughborough University

4.3.5.1 About Loughborough University

Loughborough University is a medium-sized campus University located in the town of Loughborough in the East Midlands. It received its University Charter in 1966, when it became the UK's first technological university. It has approximately 12,200 full-time students and 2,100 part-time students studying at undergraduate and postgraduate levels. In addition to its teaching activities, it is also a research intensive University. The provision, management and exploitation of ICT across the University is the responsibility of the Division of Information Services and Systems, which also incorporates Corporate Information Services, Media Services and the University Library.

The University was selected as a case study site primarily on the grounds of its implementation of an initiative designed to overcome the '*information disadvantage*' experienced by specific groups of staff at the University. This case study focuses especially on the needs of non-teaching staff.

4.3.5.2 The case study research

Six members of staff were interviewed at the University over the course of a three week period. Two members of staff were interviewed jointly (the Director of Computing Services and the Customer Support Team Manager for Computing Services) and one interview was held over the telephone. All other interviews were held singly and face-to-face. Interviews were held with the Director of Computing Services; the Computing Services Customer Support Team Manager; the Staff Development Adviser; the Training Administrator for Imago, which is responsible for the provision of campus catering services, shops, student accommodation and conference services; a Cleaning Supervisor; and the Branch Secretary of Unison. The research team also had access to the full range of University policies, including the Mass Electronic Mail Policy.

4.3.5.3 Communications policy

There is no formal communications policy as such, although the University is currently reviewing a draft information security policy which will cover the use and promulgation of information. At present, there is no policy dictating mode of information dissemination but there is a de facto bias towards the electronic dissemination of corporate information via email and the intranet. It is recognised that this does have the potential to disadvantage some members of staff, particularly those in service departments where line managers do not always perceive computer use as a valid use of time by their staff.

In response to issues of information overload, the University has put in place a Mass Electronic Mail Policy that identifies the appropriate means of disseminating specific categories of information. General (i.e. cross-University) information for staff is considered as being of three classes:

1. Messages that all staff should receive direct to their own mailbox (e.g. important security information);
2. Messages where all staff should be aware of the existence of the information but do not need to receive their own copy (e.g. news about professional development events or road closures);
3. Messages where all staff should have potential access to the information (e.g. items for sale).

Class one messages are sent by all-staff email via the Registrar's Office. Class two messages are posted to the staff (web) notice board, and a weekly digest is sent to all staff summarising messages from the previous week. Class three messages are posted on the general (web) notice board. Within departments, group email lists are used to target information. The University has also been looking at providing staff development on good email practice and how to manage heavy volumes of email.

There is acknowledgement that disseminating information electronically will not ensure that all staff receive the information, and that the mode used should depend on the criticality of the information. Hard copy information is supplied on request and service managers are expected to make key information available to their staff, either verbally or via notice boards according to the nature of the information. Team meetings are used as a forum for communication both downward and upward. However, although the University recognises its legal responsibilities with regard to information dissemination (e.g. health and safety

information), it is acknowledged that some line managers may be more effective at communicating than others.

4.3.5.4 Staff Access to Computers

For the last two to three years it has been University policy that all staff are issued with an email account and password. Previously only those on the monthly payroll got this automatically, others could obtain it by request. This move had, in turn, expedited training for estates and Imago staff. There is no policy on ratios of staff to PC levels, and the devolvement of funding for PCs to departments can act as a constraint for departments where PC use is not a core feature of the job. This has been resolved to some extent by making redundant PCs from other departments available to them free of charge. The University had also embarked on a Home Computing Initiative with a salary surrender scheme in exchange for PC equipment, but taxation changes had led to this being abandoned.

The move to issuing user accounts for all University personnel originated from a request made some years ago by the Unison representative to the Registrar and the Personnel department. The matter had been raised with the representative by individual union members, who were generally manual workers. At the time, the majority of cleaning staff had no access to information either from computers or from notice boards, which tended to be under-used. Although technically cleaners were entitled to register for a user account and could use shared computer facilities, they were not all aware of this entitlement.

Manual staff such as security staff, cleaners and maintenance staff are the group that are least likely to have ready access to a PC at the University. Although all staff, including those who work for Imago, are now given user accounts, they may have to use their line manager's PC. However, sometimes access is limited not so much by a lack of PC as by a lack of trust on the part of line managers that staff will make effective use of ICT. Where staff are based in their work may also play a part: for example, cleaners in the library may have ready access, but those in halls of residence will not. The Estates Department has made networked shared access PCs available to staff in their canteen, but this usually means that they are limited to using them in their break time. Imago has investigated setting up an open access computer training room, but there are concerns about the level of security required.

Managers and supervisors of manual staff will usually have access to a PC: cleaning supervisors, for example, will mostly have their own PCs. Those who do not have access to their own PC will be able to use one in the computer room, the student laboratories or the estates canteen. Chefs will also usually have their own PC. According to the Cleaning Supervisor who was interviewed, access to a PC and to email has made her more effective in her role. She uses it to report jobs to the estates help desk, and gets a quicker, more accurate response than in the days of paper requisitions or telephone reporting. Now, response is almost instantaneous and the job will be attended to promptly instead of having to wait two to three days. Because she receives a response with a requisition number, she knows that the job has been logged and is more confident that it will be carried out. She is also able to access information more quickly using the intranet, and her paperwork has been significantly reduced. As her staff do not have PC access, she will get information for them and if University information is circulated by email she passes it on verbally to her staff. Her line manager is supportive of her PC use as she understands how important it is to her work.

The Unison representative was of the opinion that, on the whole, staff no longer feel disadvantaged, and believes that the underlying concern had been one of access to information rather than access to computers per se. Indeed, he believed that not every member of staff wants to use a computer.

Other groups of staff that may miss out on communications such as the weekly email bulletin were identified as those who are not on the monthly payroll. This includes staff working on short term contracts in research centres. High turnover in some manual functions also causes difficulties with ensuring everyone has access.

4.3.5.5 ICT skills levels and training opportunities

All new staff are offered ICT training as part of their induction: the rights and responsibilities of ICT use are included in this training, and finding information on the Web (or who to ask if you cannot find it) is also covered. However, induction is not mandatory and not everyone attends. The University also offers an extensive programme of staff development available to all, subject to line manager approval. Part-time staff, especially those in clerical functions, can find it difficult to participate in staff development as line managers are not often able to fund their time for attending.

There is an online events database and e-booking system for staff development events. Previously staff were issued with a hard copy handbook, but with more than 500 events per year, this became administratively cumbersome. For some years now they have relied on the database of events and the e-booking system. However, this year they have realised that staff like to have paper copy, so they have reintroduced targeted flyers publicising training events for specific groups. Manual staff get information about training opportunities from their line manager.

The University recognised that lack of access to PCs might be less of a barrier for some staff than was posed by their lack of ICT skills and a lack of knowledge of where to find information. In response to recognition that residential and estates staff were disadvantaged in this way, the University organised an IT Awareness week in 2004 for these staff. This included guidance on the availability of resources, hands-on training on internet and email use as well as email rules and regulations, and a guide to further training opportunities. The initial request from Unison for manual staff to have user accounts had been instrumental in providing the impetus for this training. One interviewee felt that this union involvement had helped to dispel any initial unease that staff may have had concerning a possible hidden agenda to the training. The University was provided with two Learn Direct PCs for the training: these still remain in the estates' staff canteen for shared use. Managers were generally supportive of staff undertaking the training in work time, but it was necessary to repeat the training at different times of day in order to accommodate time off and shift patterns. A spin-off from this initiative has been the provision of evening classes for University estates staff at a local Community College.

Imago has also been proactive in providing training opportunities for their staff. They try to make these as flexible as possible in order to encourage attendance. They offer basic computer skills training, but last year there was no uptake. The Training Administrator is of the opinion that this is because they have reached a level where those who need it have already had training, and others do not want it. The course involves two-hour 'friendly' sessions each week for six weeks and is open to any Imago staff who want to attend. They also provide individual training on the use of particular software packages. They employ a

trained adult teacher who will provide one-to-one training where necessary. They have conducted a survey of IT training needs and provide training in response to identified needs. Next they would like to experiment with drop-in sessions and the use of a list of 'expert users' who are available to offer support on request.

However, some staff are not interested or motivated to develop their skills. The Cleaning Supervisor suggested that some staff are still fearful of computers: two or three years ago she felt the same, but *'the more you use them the more confidence you gain'*. This was echoed by the Unison representative who noted that, although the union would like all staff to have basic ICT skills, some staff worry about going on staff development courses. The Staff Development Advisor who was interviewed suggested that a system of IT champions embedded within departments to cascade training downwards, might be a more successful approach than formal training sessions.

4.3.5.6 Communication challenges

The potential benefits of all staff being active users of ICT were highlighted by the Training Administrator in Imago. She would like to be able to communicate directly with staff in the department, for example about training events. At the moment she has to rely on line managers to pass information on. With over 500 staff in the department, she would like to be able to *'go to source'* by emailing everyone. At the moment this would not work as she could not be sure that all staff had seen the email.

However, a lack of motivation was identified by one respondent as a barrier to improving access to information for some staff. It was noted that even where staff have home access, they may not be motivated to access work-related information in their own home using their own facilities. Furthermore, it was important that the focus of any future initiatives was on information reaching its target: extending infrastructure and PC access will not work if staff are not motivated to use ICT as their primary information source. Although the University is committed to doing what it can to provide access, there is recognition of the need for a degree of 'cultural shift' on the part of potential users and their managers.

4.3.5.7 Summary

The University has been very proactive in its attempts to provide inclusive access to all staff, particularly with regard to the development of ICT skills for manual staff. The IT Awareness Week has played a significant part here. It has also taken steps to address information overload by using carefully targeted information channels. Nevertheless, as identified clearly by respondents, issues remain concerning the motivation levels of staff and line managers towards the use of ICT as a primary communications medium.

4.3.6 University of Wales, Bangor

4.3.6.1 About the University of Wales, Bangor

Founded in 1884 in the city of Bangor on the North Wales coast, the University has over 9,000 students, over 600 teaching staff and around 300 estates staff. It has a 'complicated' estate, with around 27 sites scattered across the city, plus other satellite sites such as that in Wrexham. The University has recently appointed to a new post of Director of Corporate Communications, and there is an Information and Communications Strategy Group to steer policy and initiatives with regard to information and communications.

The University was selected as a case study site on the basis of its questionnaire response which highlighted the proactive approach that the University has taken over the years to ensure that effective communication extends to all staff groups, particularly those within the Estates Department. As an 'old' University located in Wales, it also met well with the research team's sample criteria.

4.3.6.2 The case study research

Six members of staff were interviewed at the University over the course of a single day. Two members of staff were interviewed together (the Director of IT Services, and the Senior Assistant Registrar, who had previously held the position of Deputy Director of Estates), one member of staff was interviewed singly (the Human Resources Officer with responsibility for equal opportunities) and the remaining members were interviewed together (the General Manager of Facilities and Estates; the Domestic Manager with line management responsibility for a team of cleaning staff; and the Security Manager, responsible for line management of security personnel). All interviews were held face-to-face.

4.3.6.3 Communications policy

The University does not have a formal communications policy, although the improvement of communications has been an institutional priority for some years. This has partly been driven by an internal quality review process that takes place every five years and which focuses on a range of issues, including that of communication.

In recognition of the need to enhance communication across the University, the Information and Communications Strategy Group had conducted a staff survey. This resulted in three key messages for the University:

1. Communication is central to everything that the University does and should be given a high priority;
2. Communication needs to be professionalised by the appointment of a Director of Corporate Communications;
3. They have to embed team briefings at all levels of the University.

The latter has not been fully achieved, although there has been incremental progress and many administration departments now have team briefings. A Director of Corporate Communications has now been appointed, and Senior Management are more receptive to the need to focus on communication. However, as the Director of IT Services noted, initially it can be hard to demonstrate the benefits from communication and therefore you need to have '*champions*' at all levels of the organisation.

They have worked on developing the intranet to make it more informative, particularly with regard to University policies. Most University information, including the minutes of management 'task group' meetings, are accessible from the intranet. However, it can be hard to find information on it. Document management, the demands of bilingualism and keeping everything updated pose further challenges. Email is also used widely, and will sometimes be used to point staff towards new information on the intranet. The sending of all-staff emails is 'tightly controlled' by the IT and Computing Services department. Staff with their own home computer and internet connection are able to access the University intranet and email service from home.

Hard copy is also used, including letters and memos. A hard copy newsletter is distributed to staff with their payslips. New additions to health and safety procedures are disseminated in hard copy via information booklets, and new staff are issued with an information pack. The Human Resources Officer was aware that estates and domestic staff have limited access to ICT and that therefore email could not be relied on to communicate information. She therefore sends hard copy information to line managers, and also puts it on notice boards and in staff rooms. The Domestic Manager reported that she will print out important electronic information and distribute copies to her team. A focus group for the Disability Equality Scheme had highlighted the fact that the University's reliance on intranet communication is difficult for certain groups, such as those with visual impairment. This has been recognised as an action point on the Disability Equality team. Verbal briefings are another important communication channel, and the telephone is also still widely used.

4.3.6.4 Staff Access to Computers

All staff are issued with a University user account and password. However, the distributed nature of the University's estate poses logistical difficulties in the maintenance of good communication across the University, particularly with regard to staff in the Estates Department. Security and cleaning supervisors and cleaning managers have access to a shared PC, but staff other than supervisors and managers do not have access to a PC. There are open access computers available for use by all staff who wish to do so, but lack of time can be a barrier. Each of the University's sites now has an 'information point' for these staff (usually where staff have tea or keep their belongings) where health and safety information is displayed. However, staff do not always look at the notice board.

They had held focus groups with these staff which revealed the need for extending access to Computer Mediated Communication to them. A lot of estates staff did not have access to a PC and did not possess the necessary skills to make use of ICT. As they were upgrading PCs across the University, the Deputy Director of Estates planned to make the older machines available to estates staff in various locations across the premises, after blocking the games facilities on them.

However, this plan had met with considerable resistance, and was never fully implemented. Operational managers were opposed on a number of grounds: these included doubts about whether it would work; concerns that staff would *'look at dodgy websites'*; the implications for training needs; and whether there was any purpose in the initiative (*'should cleaners have computers'?*). Some managers had been more enlightened, and there has since been a gradual 'cultural shift'. Senior Management had also expressed doubt about whether computer use was a valid use of the time of estates personnel. It was not seen as a priority issue, and the plans were abandoned when the Estates Department was reorganised in 2003. Awareness of the original problem still exists, however, and with a new Senior Management Team in place and the appointment of a new Director of Communications, the Assistant Registrar is optimistic that they will be able to make more progress.

They have also developed a 'cascading' mechanism for getting information quickly from the top of the organisation to members of estate staff, irrespective of their role or location. This was partly driven by the requirements of external quality systems such as EFQM or Investors in People.

Another group of staff that might experience difficulty in gaining access to ICT was identified as tutors who deliver courses in the community. They are not usually provided with laptop computers, but are expected to use their own facilities.

4.3.6.5 ICT skills levels and training opportunities

Staff in the University are mostly computer literate and some possess very advanced ICT skills. Younger staff joining the University will generally be computer literate on entry. New systems are requiring that staff in all areas have ICT skills: for example, the Security Manager commented that the CCTV system is now linked into computers and security staff will need computer skills to use the system. However, there are still some staff for whom lack of skills is a barrier.

Staff development courses are available for all staff, including basic ICT training and improving ICT skills. Staff can also undertake ECDL and some courses are delivered in the evening. Supervisors in the Estates Department are 'required' to take advantage of the training provided and many have ECDL. Work-related training may be undertaken during work hours. Annual reviews are held to identify staff training needs.

There are various levels of induction for staff new to the University. Corporate induction is held twice a year, but does not cover the use of IT. University induction takes place monthly, and includes signposting staff to where they can find information, but staff working less than half-time and those on short contracts do not usually attend. There is also local induction: departments and service centres are issued with guidelines that encourage them to assess staff skills levels as part of this process. The staff development team have compiled a checklist for departments to ensure that new staff receive necessary information.

For staff in the Estates Department, literacy and language skills can also be a barrier. There is some basic skills training on offer, and there is a translation unit for translating documents into or from Welsh.

4.3.6.6 E-learning

The University uses Blackboard as its VLE platform, and are planning to extend its use. In particular, the training and development team are exploring its potential for equality and diversity training.

4.3.6.7 Communication challenges

Lack of resources and a cautious approach to new initiatives have tended to constrain the full potential for the University offered by ICT. For example, security staff who work shifts used an incidents book on handover to the new shift. The supervisor on each shift can look at the notes, but reliance on a paper-based system led to delays in passing on information on major occurrences. Security staff ('on the coalface') had identified that electronic recording of incidents would allow for faster and wider dissemination and would be operationally more effective. However, this suggestion initially met with resistance on account of the time and costs involved in training security personnel. Similarly, managers from the estates department expressed doubts about their staff accessing the Internet: they would need to monitor usage as '*There is a fine line between encouraging use and time wasting*'.

As in the other case study sites, it was also noted that not all staff *want* IT access: they may feel that they do not have the time to learn new skills, and that traditional methods are

quicker for them. Indeed, one respondent commented that *'sometimes you have to step further back: staff don't always want to know more than is necessary to do their job'*.

Another challenge is the sheer volume of information that is in circulation within the University. Staff have complained that there is too much information on the intranet and they receive too much email, often of a trivial nature. The view was expressed that *'People like [email] because they assume that they've discharged their responsibility'* but they do not always know how to use it properly. Nevertheless, its advantages were also appreciated: the Domestic Manager commented that she found it far more efficient than when they had to rely on the post to contact people. The ease with which communications could be forwarded to the appropriate supervisor was seen by managers in the Estates Department as being an advantage.

4.3.6.8 Other initiatives and developments

The University is also keen to ensure that communication is a two-way process and that information filters upwards to management. They have therefore established new consultation procedures, using feedback groups with employee representation from each of the staff groups. There had also been an open meeting with the new Senior Management Team. There is now a campus Trades Union consultation forum and a student consultation forum. They had realised that consultation in the past had not been very effective: they had over 120 committees, but it was always the same people who attended them and they were not representative of the wider University. Now, consultation is far more widespread, although one respondent did comment that it can still be difficult to communicate information upwards.

The Assistant Registrar spoke of *'an unwritten organisational development agenda'*. There has been a subtle change, to a point where *'people now know more about what we're about'*. There are now some younger staff holding senior positions in the University, they have an active Human Resource Development Unit, and a move towards a culture of improvement and more progressive aspirations for the University.

4.3.6.9 Summary

The distributed nature of the University's estate poses some genuine logistical challenges for communication across the University. It is evident that communication has been a problem area for the University in the past, but that it is now recognised as a high priority and proactive steps are being taken to ensure that it is effective. This appears to be particularly the case with regard to communication from staff to management. Lack of access to PCs appears to be less of an issue than is lack of time and lack of resources for training. In addition, there are issues of trust with regard to line managers who do not always recognise the potential benefits of access to ICT for their staff.

5. Conclusions

5.1 General conclusions

Across both sectors there appears to be a broad recognition at institutional level that all staff should have some access to ICT, and in 71% of questionnaire respondents, this has been formalised into policies governing the principles of staff access to ICT and/or corporate information dissemination. This is driven partly by an increased recognition of the efficiency benefits of the computerisation of processes such as fault reporting, events booking, and purchasing and procurement. On the whole, the provision of ICT hardware and network infrastructure is no longer seen as a major problem, although institutions with very dispersed estates do face particular difficulties. Job function was the most commonly cited factor affecting staff access to ICT in the responding institutions, but there appears to be a consensus that staff who need access to a computer to do their job do have access. Institutions are making increased provision for estates staff, although they are often provided with the oldest and slowest PCs which might act as a deterrent to those who are already reluctant to engage with computer use. Contracted staff in manual roles, such as cleaning and catering, appear to be the only group who are routinely excluded from entitlement to an institutional user account.

The majority of reported initiatives to improve staff access to ICT focused on staff ICT training, and once again, there was a broad recognition of the importance of all staff possessing basic ICT skills. In particular, there were a number of examples of innovative and proactive approaches in meeting the training needs of personnel in manual roles. The real dilemma with regard to non-desk-based staff seems to rest in winning over their 'hearts and minds' (and sometimes those of their line managers). Staff themselves may not be motivated either towards using computers or gaining new skills. This may be in part due to a fear factor, especially with older staff, but may also be attributed to a lack of awareness of the potential benefits to be had. Operational managers also do not always see the need for their staff to possess these skills or to use ICT, and in some instances the lack of trust on their part that staff will make responsible use of ICT is acting as a barrier. This will, hopefully, become less of an issue as younger staff, who accept computer use as an integral part of the job, are appointed into supervisory and managerial positions. Four fifths of responding institutions currently make hard copies of corporate documentation available to staff. Whilst necessary in the current situation, the duplication of hard copy and electronic information in order to accommodate all staff groups, represents a duplication of effort and resources that the sector could more usefully deploy elsewhere.

In Further Education in particular, the combination of increased use of ILT together with large numbers of part-time sessional staff and community- or workplace-based staff poses real dilemmas with regard to access to ICT. The questionnaire findings confirm that significantly fewer academic staff in FE have a computer for their individual use, and that in a few cases there are teaching staff without access to ICT in their workplace. In the long term access issues may be overcome by the increased prevalence of wireless network access combined with mobile devices such as laptops, although cost is currently a barrier to this solution in some institutions. Increased home access can also overcome some of these difficulties, although the issues of work-home boundaries that accompany this solution are a concern for some staff. The non-availability of paid time for training is also a problem for some of these staff.

There are many examples of good practice demonstrated by participating institutions. The research findings indicate that the main issue of concern for institutions is less one of access to computers as of access to information. Moreover it has highlighted the difference between information provision (a relatively passive function) and information *communication*. Ensuring that relevant information reaches its destination, is read and understood, is not simply a matter of putting a document on an intranet or sending an email. It is suggested that a focus on communication strategies and their fitness-for-purpose would resolve many of the issues highlighted in this report.

5.2 Outcomes

The project set out to investigate the extent of restricted access to ICT-based communications across Further and Higher Education in the UK, and to explore what impact this is having on the effectiveness and efficiency of individuals and institutions. This aim has been achieved via a comprehensive quantitative evaluation across the sector: in addition, in-depth case studies have highlighted a number of issues, both anticipated and unanticipated, of relevance to the aim. The chosen methods for the research were effective in achieving the project's aim and objectives. The combination of quantitative and qualitative methods appears to have been a successful approach. The questionnaire proved an effective way of collecting information from a wide range of institutions and was able to pinpoint key issues to be explored further during the case study interviews.

The desk research indicated that this had been a relatively ignored and unexplored area as far as the sector is concerned. Although the research suggested that access to ICT equipment is, for most personnel, less problematic than might have been anticipated, and institutions have generally taken an enlightened and proactive approach to providing access, issues of time, training, motivation and, in some cases, line manager attitudes need to be addressed further. Personnel who are most disadvantaged appear to be contracted staff in manual roles; other estates staff and part-time teaching staff are also at risk of information access disadvantage. The increased use of learning technology in the teaching process, as well as an increased reliance on computerised systems for a range of administrative functions, has intensified the need for comprehensive access to ICT and, in many cases, has led to a more inclusive attitude towards ICT provision.

The research has identified some examples of good practice in facilitating more inclusive access. These include (but are not limited to):

- The supportive approach taken at the Causeway Institute towards all staff who wish to make use of ICT irrespective of their role or position, and the flexible approach towards the use of different communications media according to purpose and context;
- The ICT Pervasiveness Strategy adopted by Lauder College, which has driven the embedding of ICT across the institution, despite the difficulties posed by its large and dispersed estate;
- The carefully considered 'information cascading' approach of Loughborough College with the clear focus on the importance of team briefings – this case study also highlighted the importance of strong leadership and commitment from the top of the institution;
- The implementation of an Internal Communication Strategy and the evolving use of the information portal at the University of Chichester;

- The IT Awareness Week and subsequent follow-on training opportunities provided for manual staff at Loughborough University;
- The initiatives being adopted at the University of Wales, Bangor, to promote widespread consultation and upwards communication.

5.3 Implications

The research has highlighted a number of issues related to providing inclusive staff access to ICT that extend well beyond the provision of computer hardware or network infrastructure. It is hoped that this research will assist Senior Managers in educational organisations to identify priority areas to consider as they move towards a genuinely inclusive ICT-based environment. Issues of staff time and training may well appear here, as will those of the fitness-for-purpose of institutional communication strategies. The sharing of practice afforded by the generous co-operation of the case study sites offers an insight into alternative strategies and practice that might be of potential benefit to other institutions.

The project seminar will offer delegates an opportunity to learn more about the good practice that has been showcased in this report. In addition to presenting the project survey findings, the seminar will include representatives from three of the case study sites who will offer case study examples of practice that illustrate how different institutions are managing such issues as:

- Extending ICT access to personnel in geographically isolated and disparate locations such as prison services and community outreach services;
- Innovative approaches to extending IT skills and other basic skills training for manual staff;
- Developing and implementing inclusive communications policies;
- Introducing new initiatives intended to improve the effectiveness and inclusiveness of institutional communication.

The seminar will also be an ideal opportunity for group discussion, networking and sharing of practice.

There is much potential for further work to explore in greater depth issues identified by the research. Information overload has been shown to be of concern to many institutions and some good practice has been identified in overcoming this problem. There is scope for further work to identify the various ways in which a wider range of institutions are managing their information load.

The importance of having a formalised policy governing access and communication has been highlighted. However, the scope of the research has not allowed in-depth analysis of the content of such policies where they do exist. The sector would benefit from guidelines with regard to the potential content of such policies in order to assist those responsible for their formulation. The guidelines should extend to the dissemination strategy of such policies. This is an area where further work would prove valuable.

The research offers an insight into the current situation but does not provide a perspective into developments over time. There was evidence of many initiatives to improve access and

the dynamic environment in which institutions are operating suggest that staff access to ICT is constantly evolving. Therefore it would be of benefit to be able to build on this work with further in-depth investigation in the future.

Appendix A: Online questionnaire

Staff Access to ICT in Further and Higher Education



This questionnaire is part of a study funded by JISC investigating the impact in HE and FE institutions of restricted staff access to ICT systems. Of particular interest to the study is the dissemination of information via onsite networked communication systems. You have been identified as the relevant knowledgeable contact in your organisation on this issue. We would therefore be very grateful if you would help us by taking the time to complete the following short questionnaire by **Friday 30 June**.

All responses will be treated in strict confidence.

If you have any questions, please contact [Helen Greenwood](#) 01509 635688 or [Louise Cooke](#) 01509 228058

Institution * required field

1 Does your institution have a stated policy or policies related to the use of electronic communications media for the internal dissemination of corporate information?

(This does not refer to an Acceptable Use Policy, but rather a policy or policies relating to the means by which information is disseminated within your institution.)

Yes No Don't know

If "Yes"

a) Who has access to the policy?

	All staff	Some staff	No staff
Academic (excl research-only)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic-related	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clerical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estates and maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cleaning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Catering

b) By what means are staff made aware of this policy?

c) Do the means by which the policy is made available vary between staff groups?

Yes No Don't know

If "Yes":

Please give further details of this variance

d) Please give the URL(s) at which the policy or policies may be found, or email LISU with copies attached

2 Does your institution make hard copies of corporate documentation available?

(This relates to formal documentation produced at departmental/faculty or institutional level.)

Yes No Don't know

If "Yes"

a) To whom is documentation made available in hard copy?

	All staff	Some staff	No staff
Academic (excl research-only)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic-related	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clerical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estates and maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cleaning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Catering

b) How is this achieved?

3 Does your institution have a formal policy or policies outlining the principles of access to ICT-based communications within the Institution?

Yes No Don't know

If "Yes"

a) Who has access to the policy?

	All staff	Some staff	No staff
Academic (excl research-only)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic-related	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clerical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estates and maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cleaning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Catering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b) What does the policy cover? *Please give details*

c) By what means are staff made aware of the policy? *(Please tick all those which apply)*

- Individual e-mails
- Electronic noticeboard
- Individual flyers
- Departmental flyers
- Other *(please give details)*

d) Do the means by which the policy is made available vary between staff groups?

- Yes No Don't know

If "Yes":

Please give further details of this variance

4 a) Which of the following factors affect staff access to ICT in your institution?

(Please tick all those which apply)

- Job function

- Status/seniority

- Geographical location

- Level of ICT skills

- Type of contract, e.g. part-time, fixed term

- Financial constraints

- Other *(please specify)*

b) Please give details

5 Is there a formal policy governing which staff have their own PC?

- Yes No Don't know

6 Approximately what proportion of your institution's staff have a networked PC for their individual use? (Please also indicate whether figures are accurate or estimated)

	Accurate	Good estimate	Rough estimate
<input type="text"/> % Academic staff (excl research-only)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Research staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Academic-related staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Clerical staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Technical staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Estates and maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Cleaning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Catering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you wish to comment on the above figures, please use the box below

7 Approximately what proportion of your institution's staff have NO access to any networked PC in their workplace? (Please also indicate whether figures are accurate or estimated)

	Accurate	Good estimate	Rough estimate
<input type="text"/> % Academic staff (excl research-only)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Research staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Academic-related staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Clerical staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Technical staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Estates and maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Cleaning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text"/> % Catering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you wish to comment on the above figures, please use the box below

8 How is corporate information disseminated to staff who do not have access to a networked PC in their workplace?

9 Are networks used to deliver substantial amounts of teaching materials, e.g. via a Virtual Learning Environment (VLE)?

Yes No

10 Is ICT training made available to all staff groups?

Yes No Don't know

If "No", which groups DO NOT have access to ICT training? *(Please tick all those which apply)*

	Some staff	All staff
Academic (excl research-only)	<input type="radio"/>	<input type="radio"/>
Research	<input type="radio"/>	<input type="radio"/>
Academic-related	<input type="radio"/>	<input type="radio"/>
Clerical	<input type="radio"/>	<input type="radio"/>
Technical	<input type="radio"/>	<input type="radio"/>
Estates and maintenance	<input type="radio"/>	<input type="radio"/>
Cleaning	<input type="radio"/>	<input type="radio"/>
Catering	<input type="radio"/>	<input type="radio"/>

11 Does your institution currently have any initiatives to improve staff access to ICT?

Yes No Don't know

If "Yes", please give details. This could include both physical access and skills/expertise.

12 If you have any further comments on the subject of the study, or the study itself, please use the box below:

13 Would you be willing to consider participating further in this study by acting as a case study site?

Yes No

If "Yes", who should we contact in the first instance to discuss this possibility further?

Name

Job title

E-mail address

Tel no

Thank you for taking the time to complete this questionnaire.

Send

Clear

Form managed by lisu@lboro.ac.uk
© LISU, Loughborough University



Appendix B: Summary statistics

1. Does your institution have a stated policy or policies related to the use of electronic communications media for the internal dissemination of corporate information?

Further Education			Higher Education		
	Frequency	%		Frequency	%
Yes	32	50.8	Yes	17	30.9
No	29	46.0	No	37	67.3
Don't know	2	3.2	Don't know	1	1.8
Total	63	100.0	Total	55	100.0

If yes:

1a. Who has access to the policy?

Further Education						
	All staff		Some staff		No Staff	
	Frequency	%	Frequency	%	Frequency	%
Academic	31	96.9	1	3.1	0	0.0
Research	n/a	n/a	n/a	n/a	n/a	n/a
Academic related	32	100.0	0	0.0	0	0.0
Clerical	33	97.1	1	2.9	0	0.0
Technical	34	100.0	0	0.0	0	0.0
Estates	31	91.2	3	8.8	0	0.0
Cleaning	26	83.9	4	12.9	1	3.2
Catering	27	81.8	4	12.1	2	6.1

Higher Education						
	All staff		Some staff		No Staff	
	Frequency	%	Frequency	%	Frequency	%
Academic	16	94.1	1	5.9	0	0.0
Research	16	94.1	1	5.9	0	0.0
Academic related	16	94.1	1	5.9	0	0.0
Clerical	16	94.1	1	5.9	0	0.0
Technical	16	94.1	1	6	0	0.0
Estates	13	76.5	4	23.5	0	0.0
Cleaning	11	84.6	2	15.4	0	0.0
Catering	11	78.6	3	21.4	0	0.0

1c. Do the means by which the policy is made available vary between staff groups?

Further Education		
	Frequency	%
Yes	3	7.5
No	36	90.0
Don't know	1	2.5
Total	40	100.0

Higher Education		
	Frequency	%
Yes	4	21.1
No	14	73.7
Don't know	1	5.3
Total	19	100.0

2. Does your institution make hard copies of corporate documentation available?

Further Education		
	Frequency	%
Yes	51	79.7
No	11	17.2
Don't know	2	3.1
Total	64	100.0

Higher Education		
	Frequency	%
Yes	43	82.7
No	5	9.6
Don't know	4	7.7
Total	52	100.0

If yes:

2a. To whom is documentation made available in hard copy?

Further Education						
	All staff		Some staff		No Staff	
	Frequency	%	Frequency	%	Frequency	%
Academic	35	74.5	12	25.5	0	0.0
Research	n/a	n/a	n/a	n/a	n/a	n/a
Academic related	35	74.5	11	23.4	1	2.1
Clerical	34	70.8	14	29.2	0	0.0
Technical	34	69.4	15	30.6	0	0.0
Estates	32	64.0	18	36.0	0	0.0
Cleaning	25	56.8	12	27.3	7	15.9
Catering	28	60.9	13	28.3	5	10.9

Higher Education						
	All staff		Some staff		No Staff	
	Frequency	%	Frequency	%	Frequency	%
Academic	25	59.5	17	40.5	0	0.0
Research	24	57.1	16	38.1	2	4.8
Academic related	25	59.5	17	40.5	0	0.0
Clerical	24	58.5	17	41.5	0	0.0
Technical	25	62.5	15	37.5	0	0.0
Estates	23	57.5	17	42.5	0	0.0
Cleaning	19	51.4	12	32.4	6	16.2
Catering	19	51.4	13	35.1	5	13.5

3. Does your institution have a formal policy or policies outlining the principles of access to ICT based communications within the Institution?

Further Education		
	Frequency	%
Yes	44	67.7
No	18	27.7
Don't know	3	4.6
Total	65	100.0

Higher Education		
	Frequency	%
Yes	30	55.6
No	24	44.4
Don't know	0	0.0
Total	54	100.0

If yes:

3a. Who has access to the policy?

Further Education						
	All staff		Some staff		No Staff	
	Frequency	%	Frequency	%	Frequency	%
Academic	40	95.2	1	2.4	1	2.4
Research	n/a	n/a	n/a	n/a	n/a	n/a
Academic related	42	95.5	1	2.3	1	2.3
Clerical	42	95.5	1	2.3	1	2.3
Technical	42	95.5	1	2.3	1	2.3
Estates	40	90.9	3	6.8	1	2.3
Cleaning	30	76.9	4	10.3	5	12.8
Catering	30	76.9	3	7.7	6	15.4

Higher Education						
	All staff		Some staff		No Staff	
	Frequency	%	Frequency	%	Frequency	%
Academic	29	96.7	1	3.3	0	0.0
Research	29	96.7	1	3.3	0	0.0
Academic related	29	96.7	1	3.3	0	0.0
Clerical	29	96.7	1	3.3	0	0.0
Technical	28	93.3	2	6.7	0	0.0
Estates	28	93.3	2	6.7	0	0.0
Cleaning	22	78.6	3	10.7	3	10.7
Catering	23	82.1	3	10.7	2	7.1

3c. By what means are staff made aware of the policy?

Further Education		
	Frequency	%
Individual emails	22	50.0
Electronic notice board	19	43.2
Individual flyers	2	4.5
Departmental flyers	6	13.6
Other	24	54.5

Higher Education		
	Frequency	%
Individual emails	13	41.9
Electronic notice board	19	61.3
Individual flyers	4	12.9
Departmental flyers	3	9.7
Other	17	54.8

3d. Do the means by which the policy is made available vary between staff groups?

Further Education		
	Frequency	%
Yes	4	9.1
No	39	88.6
Don't know	1	2.3
Total	44	100.0

Higher Education		
	Frequency	%
Yes	4	12.1
No	27	81.8
Don't know	2	6.1
Total	33	100.0

4a. Which of the following factors affect staff access to ICT in your institution?

Further Education			Higher Education		
	Frequency	%		Frequency	%
Job function	41	68.3	Job function	45	86.5
Status/seniority	16	26.7	Status/seniority	7	13.5
Geographical location	23	38.3	Geographical location	11	21.2
Level of ICT skills	22	36.7	Level of ICT skills	14	26.9
Type of contract	22	36.7	Type of contract	10	19.2
Financial constraints	19	31.7	Financial constraints	8	15.4
Other	8	13.3	Other	12	23.1

5. Is there a formal policy governing which staff have their own PC?

Further Education			Higher Education		
	Frequency	%		Frequency	%
Yes	16	25.8	Yes	6	11.1
No	45	72.6	No	48	88.9
Don't know	1	1.6	Don't know	0	0.0
Total	62	100.0	Total	54	100.0

6. Approximately what proportion of your institution's staff have a networked PC for their individual use? (Please also indicate whether figures are accurate or estimated)

Further Education								
	Mean (%)	Count	Accurate		Good estimate		Rough estimate	
			Frequency	%	Frequency	%	Frequency	%
Academic	69.5	61	13	22.4	35	60.3	10	17.2
Research	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ac-related	84.0	52	18	36.0	24	48.0	8	16.0
Clerical	96.0	64	33	56.9	17	29.3	8	13.8
Technical	90.0	63	28	48.3	21	36.2	9	15.5
Estates	57.1	61	19	32.8	27	46.6	12	20.7
Cleaning	4.5	53	15	30.6	23	46.9	11	22.4
Catering	16.3	56	13	24.1	24	44.4	17	31.5

Higher Education								
	Mean (%)	Count	Accurate		Good estimate		Rough estimate	
			Frequency	%	Frequency	%	Frequency	%
Academic	97.0	54	20	37.7	26	49.1	7	13.2
Research	94.5	54	22	43.1	23	45.1	6	11.8
Ac-related	95.7	55	18	35.3	26	51.0	7	13.7
Clerical	96.9	55	18	35.3	25	49.0	8	15.7
Technical	93.6	55	17	32.7	22	42.3	13	25.0
Estates	50.7	55	8	14.8	22	40.7	24	44.4
Cleaning	7.2	50	5	10.9	16	34.8	25	54.3
Catering	13.9	52	6	12.2	15	30.6	28	57.1

7. Approximately what proportion of your institution's staff have NO access to any networked PC in their workplace? (Please also indicate whether figures are accurate or estimated)

Further Education								
	Mean (%)	Count	Accurate		Good estimate		Rough estimate	
			Frequency	%	Frequency	%	Frequency	%
Academic	2.5	51	34	77.3	7	15.9	3	6.8
Research	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ac-related	1.2	50	33	80.5	7	17.1	1	2.4
Clerical	1.1	53	35	77.8	7	15.6	3	6.7
Technical	1.0	52	34	79.1	6	14.0	3	7.0
Estates	7.8	51	33	76.7	6	14.0	4	9.3
Cleaning	38.9	49	32	76.2	7	16.7	3	7.1
Catering	29.7	49	28	66.7	10	23.8	4	9.5

Higher Education								
	Mean (%)	Count	Accurate		Good estimate		Rough estimate	
			Frequency	%	Frequency	%	Frequency	%
Academic	0.1	49	26	61.9	11	26.2	5	11.9
Research	0.0	48	25	64.1	9	23.1	5	12.8
Ac-related	0.0	49	26	65.0	9	22.5	5	12.5
Clerical	0.0	49	27	69.2	8	20.5	4	10.3
Technical	2.0	49	25	62.5	8	20.0	7	17.5
Estates	12.8	49	19	47.5	12	30.0	8	22.5
Cleaning	28.8	47	18	46.2	12	30.8	9	23.1
Catering	25.4	47	17	42.5	11	27.5	12	30.0

9. Are networks used to deliver substantial amounts of teaching materials, e.g. via a Virtual Learning Environment (VLE)?

Further Education		
	Frequency	%
Yes	54	83.1
No	11	16.9
Total	65	100.0

Higher Education		
	Frequency	%
Yes	49	90.7
No	5	9.3
Total	54	100.0

10. Is ICT training made available to all staff groups?

Further Education		
	Frequency	%
Yes	54	83.1
No	11	16.9
Don't know	0	0.0
Total	65	100.0

Higher Education		
	Frequency	%
Yes	40	74.1
No	11	20.4
Don't know	3	5.6
Total	54	100.0

If "No", which groups DO NOT have access to ICT training?

	Further Education			
	All staff		Some staff	
	Frequency	%	Frequency	%
Academic	1	6.7	0	0.0
Research	n/a	n/a	n/a	n/a
Academic related	1	6.7	2	13.3
Clerical	1	6.7	3	20.0
Technical	1	6.7	2	13.3
Estates	2	13.3	5	33.3
Cleaning	7	46.7	5	46.7
Catering	5	33.3	7	33.3

Higher Education				
	All staff		Some staff	
	Frequency	%	Frequency	%
Academic	3	30.0	1	10.0
Research	3	30.0	0	0.0
Academic related	2	20.0	1	10.0
Clerical	2	20.0	1	10.0
Technical	2	20.0	2	20.0
Estates	2	20.0	7	70.0
Cleaning	6	60.0	3	30.0
Catering	4	40.0	4	40.0

11. Does your institution currently have any initiatives to improve staff access to ICT?

Further Education		
	Frequency	%
Yes	52	81.3
No	10	15.6
Don't know	2	3.1
Total	64	100.0

Higher Education		
	Frequency	%
Yes	28	53.8
No	22	42.3
Don't know	2	3.8
Total	52	100.0

Appendix C: Case study protocol



Department of Information Science

JISC Staff Access to ICT project: Case Study Protocol

1. Project Overview

The JISC Staff Access to ICT project aims to assess levels of staff access to ICT systems within institutions across the UK FE and HE sectors, focussing in particular on access to networked communications systems. Where restrictions on access are found, it aims to investigate the impact of non-access on the efficiency and effectiveness of the institutions and of individual members of staff. It also aims to identify examples of good practice, either in extending staff access to ICT, or in adopting innovative approaches to mitigating the negative impact of such restrictions.

2. Methodology

In addition to a questionnaire survey designed to collect predominantly quantitative data on levels of staff access to ICT across the sectors, case studies will be developed in six institutions (three FE and three HE) that have agreed to co-operate further with the research. These studies are intended to collect more in-depth qualitative data, particularly with regard to the impact on effectiveness and efficiency of restrictions on network access. In addition to having indicated a willingness to participate in the research, these institutions have been selected on the basis of the 'intrinsic interest' of their questionnaire responses, particularly with regard to evidence of good practice in this arena.

The case study research will involve a visit to each site, during which informal interviews will be held with a range of personnel (identified prior to the visit). The interviews will be conducted jointly by the Principal Investigator (Dr. Louise Cooke) and the Research Associate (Ms. Helen Greenwood). Where interviewees are willing, interviews will be recorded to aid subsequent analysis. Interviewees may include some or all of the following personnel, plus any other representatives who are identified as potentially relevant:

- ◆ Head of IT and/or Information Services;
- ◆ Representative of Estates department;
- ◆ Line Managers of ancillary personnel, e.g. cleaning, catering;
- ◆ Equality and Diversity Officer;
- ◆ ICT Champion or E-Learning Manager (as appropriate).

In the first instance, the initial questionnaire respondent will be contacted in order to check the continued willingness and availability of the institution to act as a case study site, and as a means of gaining contact details of relevant personnel to approach for interview.

3. Question Framework

Although specific questions to be asked will, in most instances, be guided by responses to the initial questionnaire, it is anticipated that the following general themes will be explored:

- ◆ The existence and implementation of access and communication policies;
- ◆ The use of ICT to disseminate corporate information, and the extent to which hard copy provision of information is made available;
- ◆ Categories of staff with restricted access or no access at all and how this impacts on their work;
- ◆ The provision of training in the use of ICT systems, and to which categories of staff such training is made available;
- ◆ Examples of the negative impact of restrictions on access with regard to institutional effectiveness and efficiency, and on that of individuals;
- ◆ Examples of current initiatives within the organisation that are intended to extend access or to counter the negative impact of restricted or non-existent access.

Although these reflect similar issues to those investigated by the survey, the intention behind the case studies is to gather more meaningful, in-depth information that explains and elaborates on questionnaire responses. Where possible, copies of relevant documentation will also be obtained, and observation made of staff PC facilities.

4. Data collection and reporting issues

- ◆ Individuals and institutions will be offered the possibility of remaining anonymous in the final project report and the confidentiality and anonymity of participants and institutions if requested will be respected;
- ◆ Participation in the study will be on the basis of informed consent, and all participants will be informed of their right to withdraw from the study at any point;
- ◆ Data collection will be determined solely by the needs of the central research questions and will be carried out with a minimum of disruption to the institutions concerned;
- ◆ Interviews will be carried out using a pre-determined framework consisting of a small number of open-ended questions – interviews will not generally last more than 60 minutes;
- ◆ To ensure accuracy of data reporting, interviews will be recorded using audio recording equipment, unless participants prefer only written recording to take place – all interview tapes and transcripts will be destroyed on completion of the project;
- ◆ It is hoped that the findings of the project will be beneficial to participating institutions by providing a benchmark of provision across the sector as well as an insight into examples of good practice on the part of a range of institutions.

Louise Cooke
July 2006

Appendix D: Case study participants

Causeway Institute

Pat Bradley	Estates Officer
Suzanne Graham	MIS Manager
Brian Griffith	Assistant Principal
David McCartney	Senior Caretaker
Joan McLean	Personnel Officer
Peter Ming	ILT Co-ordinator
Kathleen Mullen	Key Skills Co-ordinator & Catering Manager
Steven Walls	ICT & E-learning Manager, & FOI Officer

Lauder College

Denise Breckenbridge	E-Learning Co-ordinator
Diana Duncan	Estates Administration Assistant
Peter Falconer	ICT Manager
Geraldine McLuckie	Staff Development Manager
Fiona Rollo	Development Manager - Quality
Karen Stenhouse	Senior HR Advisor

Loughborough College

Ann Bullock	Staff Development Manager
Peter Dickson	Team Leader – Teacher Development
Ray Heasley	Systems Manager
Clare Holden	Learning Resources Manager

University of Chichester

Steve Frampton	Head of IT
Terry Hanson	Director of Information Services
Mike Sellers	Head of Estates and Resources
Louise Tengrove	Head of Equality and Diversity
Vince Trump	Head of Planning and Campus Services

Loughborough University

Claire Bradshaw	Professional Development Officer
Michelle Cunningham	PA to Director of Imago & Imago Training Administrator
Dave Jordan	UNISON Branch Secretary
Rob Kirkwood	Customer Support Manager, Computing Services
Sandra Moody	Cleaning Supervisor
Dr Brian Negus	Director of Computing Services

University of Wales Bangor

Jackie Ellis	HR and Equal Opportunities Officer
David Fordham	Senior Assistant Registrar
Tony Monument	Security Manager
Julie Snelson	Information Systems Manager
Yvonne Williams	Domestics Manager
Meryl Wyn-Jones	General Manager - Facilities