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# Appendix 1: Communities and Key Roles

## Communities

The two communities studied at Loughborough University were:

- The Finance Office
- The Research Office

### The Finance Office

#### Role of Finance Office

- To keep the university solvent
- To inform financial decisions of the university
- To ensure statutory compliance
- Financial and strategic planning
- To provide proper, appropriate financial advice to everyone in the university

### The Research Office

#### Role of the Research Office

- To support the strategic development of research activity at Loughborough University
- To raise the profile of research at Loughborough University
- To increase the number of applications for external funding
- To get the highest possible scores in the Research Assessment Exercise (RAE)

## Key roles

At the beginning of each interview participants were asked to outline the main tasks associated with their role.

### Finance Office

#### *Deputy Director of Finance*

- Day to day running of the Finance Office – answerable to the Bursar
- To sit on the major University Committees inputting from financial/business perspective
- Director of all Loughborough University Subsidiary Companies
- Trouble shooting (ad hoc work as issues arise/people management)

#### *Senior Management Accountant*

- Maintain university budget
- Monitor expenditure in all departments
- Claim money from HEFCE and other grant awarding bodies

- Oversee functions of Payroll Office and Management Accounting and Planning Office

### ***Senior Accounting Assistant***

- Create Resource Allocation System and Cost Apportionment (RASCAL) reports
- Staff forecasting
- Payment of rates
- Validation of departmental journals

### ***Senior Financial Accountant***

- Year end accounts
- HESA returns
- Risk Management
- Insurance
- Compliance
- Quarterly Management accounts

### ***Financial Accountant***

- Treasury Management
- Financial accounting
- Preparation of financial and statistical returns
- Administration of endowed funds
- IT co-ordination for the department

### ***Payroll and Pensions Manager***

- Control and monitor payroll process
- Control of pensions
- Ensure that returns are sent to external organisations e.g. Inland Revenue
- Reconciliation of payments

### ***Payroll Assistant***

- Input information about staff onto payroll system
- Deal with pay claims from individuals
- Run payroll calculations for end of the month

## **Research Office**

### ***Research Office Manager***

- To manage Research Office
- Co-ordination, management, training and induction of staff
- Control of budget
- Development of Policy and Strategy and of the Research portfolio
- Management and planning for Research Assessment Exercise (RAE) 2008

- Responsibility for office systems and procedures
- Networking with external organisations

#### ***Research Development Officer/European Funding Officer***

- Support academic staff in identifying and securing research funding
- Support academic staff in contract negotiation and project management
- Feeding key policy information to the Research Office Manager and Pro Vice Chancellor for Research

#### ***RAE and Research Support Officer***

- Research Assessment Exercise (RAE) 2008
- Research Scholarship Scheme
- Research Ethics
- Research Activities Survey (RAS)

#### ***Grants and Contracts Assistant***

- Costing and pricing research activities
- Assisting academics with research applications
- Management of research applications database
- Contract negotiation work
- Setting up research accounts

## **Appendix 2: Interview Results**

### **2.1 i-skills common to the Research and the Finance departments**

#### **2.1.1 Identifies information need**

##### **Determines the nature and extent of the need**

All of the participants gave examples of times when they had to determine the nature and extent of the information they required.

*“When an academic requires assistance with a research application they will make initial with me either by email or phone. I ask them for an outline of who they are applying to i.e. what funding bodies and under what scheme.”*

*“I was called in at short notice to stand in for bursar at various meetings that were being held namely the [name of meeting] and the [name of meeting]. I needed to be in a position to say something sensible with only a couple of hours notice to take this work on I rang the Registry to ask for papers to be sent over. I knew about situations in broad terms but not specifics so I needed to research the specifics.”*

Barriers relating to this stage included the question not always being well defined:

*“Sometimes when I receive a query from the bursar I am not always sure about them but when that does occur I will go to him and ask him to explain and identify where he wants me to get this information from.”*

##### **Confers with colleagues**

Conferring with colleagues was referred to by some participants. More references to this were made in interviews with staff from the Finance Office than the Research Office.

*“One of the things being looked at concerned the university’s commitment to investing £n in new academic posts as a result of top up fees... I had to get all the departmental business plans out. I knew that they were held by the Senior Management Accountant so I spoke to her and from there I identified specific questions”*

*“The Research Office Manager and I will either be writing a new Research Ethics Policy or an amendment to the present policy. It is a new area to me so I need to familiarise myself with a lot of new ideas. I have to learn the knowledge. I am trying to find information to help me to do this. Looking, as I am at a new area I do have questions and queries so I do discuss issues with my manager.”*

One participant recognised the need to confer with her colleagues but expressed the fact that she was not located close to them as a barrier.

*“I need to build up some networking systems within the university e.g. with core people in the Registry. I am aiming to set up regular meetings. At other institutions people doing the RAE would normally sit in the Registry. If I was in the Registry my job would probably be easier*

*because there would be colleagues who would understand the RAE and other surveys and student data manipulation. I do confer with people in the Registry but it isn't the same. Physical location is important."*

### **Use of current awareness services and discussion lists to keep up to date**

In the Finance Office only two of the seven participants used a current awareness alerting service. By contrast, three of the four members of the Research Office team subscribed to alerting services:

*"I use alerting services it is vital in my role."*

Members of the Research team were very conscious that they had to keep up to date with all new developments in their sector and all members of the team subscribed to discussion lists.

There was some negative comment regarding discussion lists:

*"I read what is pertinent but the price I pay is dealing with the numbers that are not pertinent."*

*"I did once belong to a discussion list on the pensions' side but it has been disbanded. It was useful to have a forum like this to discuss problems that arose. I think the problem was that the list got a bit bogged down by the same people monopolising it once that starts happening some people will lose interest."*

Some members of the Finance Office were unaware of discussion groups in their area but thought that they might be useful:

*"It would be handy if universities shared their information more, if there was somewhere you could go to look at all of this. I am not aware of any discussion lists or blogs but something like that would be useful."*

*"I am not aware of any discussion groups but they could be useful."*

### **Knowledge of appropriate resources**

All participants gave examples of knowledge of appropriate resources:

*"We need to know what all the figures are within each individual account. We need to substantiate them and check if any adjustments need to be made. I need to interrogate the CIS system."*

*"We begin with high level strategic discussions we provide benchmarking data to the various committees so that departments can decide where they need to be in five years time to have chance of improving their grades. We start by looking at websites for the results of all universities last time around in 2001 to get benchmark data and then we need to look at internal data and compare the two."*

In the Finance Office, particularly at more junior levels, it was knowledge of the finance systems which was referred to:

*"We have to pull a report off the system and calculate a percentage. In this case I am dealing with maternity pay so every month I go to that month on the Trent system."*

At the senior levels in both exemplifications knowledge of appropriate resources took on a broader remit:

*“In response to the AUT/NATFE action the Vice Chancellor wanted to know what our position and stance should be and I was asked to find out about salary trends at Loughborough and in the sector generally. I needed the last five years of university payroll data. I spent a significant amount of time looking on the web and going through other university’s financial statements ...then I had to go through the HESA and HEFCE data.”*

### **2.1.2 Assesses information need**

#### **Need to develop a research plan**

Two participants from the Finance Office and all participants from the Research Office demonstrated examples of planning their research.

*“In February or March one of the accountants receives a grant letter from HEFCE, a student load model from the Registry and space data from the Estates Department. I will meet with him to plan and make sure that he knows what information he needs to build a financial model.”*

*“My debt collector armed me with all the relevant information... I needed to find out why the contract wasn’t signed, why three large invoices were outstanding, why they were issued late basically what the issues were and why the company were not paying.”*

*“When the RAE guidelines came out they confirmed that the census date was 31st July. We had always collected the data on 1st December. Normally we would use the RAS data and adjust it for the new start situation. We are required to provide historic data about all students registered on 31st July going back to 2001. The information we have shows records of student numbers on 1st December. We have never stored data about numbers on 31st July. So we have to find a solution to this problem. Now we have to use completely different data and adjust it for our needs. That means I have had to look at various other surveys carried out over this period and try and find the information from them.”*

For those working with the finance systems there was little or no mention of planning how to find the information. It appeared to be a matter of knowing what to do through experience:

*“I know what information I need at this stage through experience. If you look at a RASCAL report it tells you what you need...”*

*“Knowing where to look for this information is a matter of experience”*

#### **Need to construct search strategies**

Three participants from the Finance Office and all participants from the Research Office demonstrated examples of constructing search strategies.

*“The Finance system gives details on each of the funds...I need to create a simple search of a range of codes over a certain date to access the information.”*

*“Out of the blue I received a call from the Executive Secretary to the House of Commons Select Committee in relation to an enquiry into human enhancement technology in sport... that involved*

*spending a couple of hours on the Web. I started with Wikipedia I wanted a definition of human enhancement technology so I started there looking at the range of terms encompassed by human enhancement that lead to other links.”*

Participants did not always use formal search strategies:

*“I use Google 2 or 3 times a week. It is a case of trial and error, just a matter of learning what triggers to use.”*

### **Selection of best resources**

There were more references made to selection of best resources in the Finance Office than the Research Office. A number of the participants from the Finance Office (at all levels of seniority) made the point that there was only one place to find the data/information they were looking for and that was on the system. It was different when it came to searching on the web:

*“You can often get information from a number of sources coming at it from a different slant. You need to be aware of what is most relevant to your needs in other words you need to evaluate the sources for your purposes.”*

*“I had to see if I could get information about departments and research groups to see if what was being asked for fitted in with the work that was being done. I looked at departmental websites to see how what they were proposing fitted in. I am not an academic and a lot of these posts although academic posts were very much geared around research strategies and augmenting research groups so I had to look into the activities of various research groups.”*

### **2.1.3. Retrieves information**

#### **Accesses needed information**

Participants accessed information from different sources:

*“I then search the websites for details of the call whereby academics can apply for research funding. I look up references to the particular call which can be very detailed”.*

*“All the information I need comes from the CIS financial system within that there are lots of different areas each bit comes from a specific place so I know where those places are. For instance one area is research groups if I want to know what they have been spending I will run off a report from there.”*

Interviewees highlighted a number of challenges which they encountered when attempting to:

- Access information from websites

*“Accessing information not written in English on the European Commissions website can be difficult.”*

*“The European Commission websites have so much information on them so that unless you are very well versed in where to find it the navigability’s quite poor and often the search function on those sites is quite poor.”*

- Access information from the system

*“Being equipped with the knowledge of software that will help to find information on the system can be a problem. The information can be on the system but there are restrictions on the system itself. You rely on other products to enable you to access the information. You have to be aware of the solutions out there. Usually I learn about products through word of mouth.”*

*“Problems with the system sometimes they can be diverse and illogical so then it is a case of going to the Helpdesk and getting them to do a fix.”*

- Access information from people

*“One of the major difficulties accessing the information was trying to do it tactfully and diplomatically without breaking the deal.”*

*“I attempted to learn more by speaking with people from Estates but in the event was unable to track anyone down. I find working in a university there is not a 9-5 culture and people have very diverse working patterns. Getting hold of people can be an issue and a barrier to finding information.”*

*“Sometimes there are problems getting information to people – problems with what departments are called and where they are located.”*

*“It can be a problem getting people to come back to you with information. If that happens I will tend to cc. Head of Departments in when I send an email and then if that doesn’t work I’ll cc. the bursar in. You can find yourself chasing people up for months.”*

#### **2.1.4. Evaluates information critically**

##### **Evaluates information**

A number of participants from the Finance Office pointed out that once they had found the information/data they required on the system there was no need to evaluate it. All participants from the Research Office cited examples of evaluating information. Only two participants from the Finance Office did so.

*“I am evaluating information all the time it needs to be digested and appropriate action taken.”*

*“You evaluate websites as you look at them. You work out which websites provide you with the most up to date info and info of the highest quality.”*

*“The Treasury Management Procedures had not been looked at for years and the Treasurer asked that they be reviewed...from there it was a matter of taking the bits I wanted to use from each document and putting them together.”*

The following is typical of comments made by a number of participants when discussing searching on the web:

*“I found a lot of sources [on the web] in fact too many depending on which ones you looked at you seemed to get a different answer rather than there being a definitive answer...It’s not a lack of information; it is more a lack of understanding how it was derived so that you know you are interpreting/analysing it correctly. A lot of the time it is not trusting what you are looking at.”*

### **Identifies gaps in the information**

This was mentioned by one participant from the Finance Office and two participants from the Research Office:

*“There is a physical store of files held with all the information ever received on funds. Occasionally there is not enough information there. It could be that the department where the fund originated have moved the information so I would ask there.”*

*“I need the HESA data for the five or six years that we are covering. At the moment I have only got two years of data. I don’t have data for 2001-2003. ...At the moment I am downloading data from the CIS and manipulating that but the older data isn’t there.”*

### **2.1.5. Adapts information**

#### **Adapts and analyses information**

All participants demonstrated their adaptation of information:

*“You can’t just download information and feed it into a report it all needs analysing. You need to be able to pick out the relevant information and analyse it and then feed it back into the reports.”*

*“To date I’ve done a précis on Whistle blowing. I’ve looked at the current university policy document and annotated it where I think there are gaps and now I am going through other universities’ documents and I will come up with a draft policy.”*

#### **Manipulates data as needed, transferring from original formats and location to new contexts**

This sub category applies to adaptation of information held on systems. Four members of staff from the Finance Office and one member of staff from the Research Office demonstrated examples of manipulating data.

*“Once I had found all the information I needed it ended up getting meticulously plotted in many spreadsheets.”*

*“I need the HESA data for the five or six years that we are covering. At the moment I have only got two years of data. I don’t have data for 2001-2003. It may not be available in the right format.”*

### **2.1.6. Organises information**

#### **Organises paper and electronic files**

All participants referred to the management of information in hardcopy and electronic format:

*“I often keep the information I find for future reference. I’ll print it off in hardcopy and put it into my file. Often with applications I will keep a personal file for the individual. I keep that separately under an alphabetical system so I print off the emails; the RACE costs and a draft copy of the applications a reference to go back to if there are any enquiries.”*

*“On the Y drive under Management Accounts (my name) I’ve got four folders... This Year folder is broken into months... I’ve got pay and non pay and equipment. They are all my little individual reports that feed into the big report... there is always an audit trail. I can see where the information came from... I like to keep things in things so I know where everything is.”*

Some problems organising information on the finance system were discussed:

*“There can be some difficulties organising information on the system but then we need to get back to the suppliers and get consultants in.”*

### **Sharing information**

There was more evidence of the sharing of information in the Finance Office than the Research Office. This was an issue which one of the participants had addressed when she took up her post.

*“This was an issue I addressed when I arrived here. Historically, particularly in terms of electronic stuff people have traditionally kept things in their own personal folders as opposed to putting them on the financial shared drive. I’m trying to push people to put more on the shared drive and people are moving that way.”*

*“Yes I use the shared drive all the time. Every thing goes in there except for personnel and salary information.”*

However not all members of staff in the Finance Office were as aware of the purpose of the shared drive:

*“I do not need to use the shared drive. I don’t know what sort of information is on there. I think it is an area that all of finance can access but I have never needed to use it.”*

One of the participants had considered the need for a better culture of information sharing and was in the process of addressing this:

*“More use needs to be made of the shared drive system and there needs to be more electronic storage of information. Electronic storage of attachments to project files is something we need to develop more. That relies on PDF scanning capability. We do share information on our shared drive but perhaps not as much as we should. The whole transition from a hardcopy based environment to an electronic one can be difficult. We need to share information between potentially a team of ten and it is easier to have the information in hardcopy format sometimes, especially where you need an audit trail for the financial bids to show how the process has been managed. We are working towards managing this electronically.”*

### **Management of email**

All participants demonstrated an ability to manage email. There were differences in approaches taken:

*“I have 1,962 folders. The number of folders reflects the breadth of what I have to deal with. I have to have an overview of the Office so I have certain strategic high level folders e.g. funding will be one folder with perhaps fifty sub folders.”*

*“I have a library of about forty folders of things I think it is relevant to keep. I have no problems archiving.”*

Common problems arose when people received blanket emails not always relevant to them:

*“...it is very annoying when people cc. you in on emails that are not really relevant.”*

There were problems with the storage of email:

*“There are problems with storage. Having the ability to receive information, file it and archive it with easy personal access to the archives would help me.”*

There was a question over the efficiency of using email to convey information:

*“There can be problems of information overload when it comes to emails people’s machines are choc a bloc with email traffic they can often overlook or miss things. I am a great believer in using the phone when relevant. Sometimes information can be more efficiently conveyed by phone compared with email.”*

### **Knowledge of the legal issues surrounding the storage and use of information**

All participants replied positively to the question “Do you have an understanding of the ethical, legal social and economic issues surrounding the use and management of information?” It was, however, clear that the level of understanding varied.

*“Yes over time I’ve become a lot more clued up.”*

*“I know where information should be kept and for how long and I know what is confidential.”*

Some participants had attended courses run by Professional Development:

*“Yes I have attended PD courses on FOI, data protection etc.”*

### **2.1.7. Communicates information**

#### **Produces document/ report**

Members of staff from both exemplifications produced documents and reports. No difficulties or problems were reported:

*“The final report was a written report with as few numbers as I could get away with just headline numbers to focus minds.”*

*“I was then able to provide the Executive Secretary of the Committee with a report outlining some suggestions and slightly glossing over the fact that I had found the information on behalf of my colleagues in the academic departments.”*

#### **Communicating via email, telephone and face to face**

All participants communicated in all of these ways:

*“There followed negotiation about what could be done with it but that failed to come to a satisfactory conclusion. I emailed the HOD asking him to put everything in writing for the bursar.”*

*“I rang Personnel. The Director of Personnel who had this information was on holiday but his assistant knew that I was allowed to have this information so she was able to tell me over the phone.”*

*“Initial contact is made by an academic to me either by email or phone. I ask them for an outline of who they are applying to i.e. what funding bodies and under what scheme. This is often followed by a one to one meeting.”*

### **Communicating via PowerPoint**

This medium was used by senior members of staff in both exemplifications.

*“I do a lot of power-point presentations for departments and Research Groups and Senior Management training courses.”*

*“I do Power-point presentations but it does annoy me that I also have to print off handouts. It seems to defeat the object.”*

### **2.1.8. Reviews the process**

Four participants from the Finance Office and two from the Research Office reviewed their work:

*“Yes at the end of the process I do review what I have done. I will make notes for the following year and any changes that need to be made I will make.”*

*“I constantly review what and how I am doing things to see if it can be improved.”*

Most participants acknowledged that reviewing work was good practice but finding the time to do it was not easy:

*“Reviewing work is good practice but pressure of time and volume of work makes this difficult.”*

*“I know that reviewing my work is important and I do it. I am quite critical of my own work but I often feel that there just isn't the time to do it properly.”*

The members of staff who worked at a junior level felt that their jobs were straight forward and routine. The following comment was made by a member of staff working at a junior level in the Finance Office:

*“I never need to review how I have done things at the end of the process. There is only one way to do the job. It is straight forward.”*

Participants were also asked to consider what information sources they used in the course of their work. A full list of these is provided in appendix 4.

## **2.2 i-skills specific to the Finance department**

### **2.2.1 Identifies information need**

#### **Brainstorming**

This was referred to by one participant:

*“At this time I meet with the bursar to agree the basis of some estimates we will make on things like research grants, income for the following year. We will use government’s previous estimates of inflation and we use strategic plan targets and updates to that which have been received through Committee to decide on estimates we are going to use for further income streams. It is usually routine but sometimes through discussion with the bursar and his deputy I will be alerted to things I didn’t know about.”*

Although no other participant demonstrated the use of brainstorming a member of staff from the Research Office did recognize the potential benefits of brainstorming.

*“It would help if there were a few other people who understood the data as well as I do but there are not. It would be useful to have people to do a bit of brainstorming.”*

### **2.2.2 Retrieves information**

#### **Selects appropriate information**

All participants accessed information but three participants were assigned to this sub category because they emphasised in their replies the exactness of the nature of the information they were looking for. In all cases this was information from spreadsheets.

*“I pull off the information I need e.g. pay. The information on pay is found in lots of different places so I just have to go through and pick out what I need.”*

*“On each payroll reconciliation period the rates have to be checked to see if they are correct % rates. If they are not I need to access the information for that particular period. I would need to run the pension reports from the payroll on the Trent system to find out. This information is only kept in one place. I always know what information I’m looking for.”*

### **2.2.3 Communicates information**

#### **Communicating information in a format appropriate for the audience**

When discussing the communication of information participants from both exemplifications referred to the writing of reports as reported in section 2.1.7. Participants made references to other means of communicating information with an audience in mind. This issue of other means of communication did not arise in interviews with participants from the Research Office, though, of course, that is not to say that other means are not employed.

*“The spreadsheet I am going to send over to County Hall I have got to balance. I have got to say this is what we have deducted from our employees this year and you have to balance those contributions to the spreadsheet that is coming out of the system so you might be coming up with a difference between these two figures and you have go to find that difference”.*

*“I write reports for committees to accompany budgets. They are done in Word. I also write financial reports, which are more likely to be done in Excel.”*

It was thought that conveying information related to figures needed to be considered carefully:

*“Once I had found all the information I needed it ended up getting meticulously plotted in many spreadsheets and it then it becomes a question of filtering it for the audience because clearly it is*

*easy as an accountant to produce reams of paper with numbers on that the average person will look at and go aagh! So it becomes an issue of making it user friendly and interesting and appropriate for the audience.”*

## **2.3 i-skills specific to the Research Office**

### **2.3.1. Communicates information**

#### **Communicating via telephone/audio conferencing**

This method of communication was referred to by two participants from the Research Office.

*“I’ve used telephone conferencing quite widely e.g. if there is a contract negotiation with multiple parties. I’ve only used video conferencing twice in the last five years. That was for an interactive discussion with members of the European Parliament.”*

*“I have Yahoo Messenger software, which enables me to take part in audio conferencing. It doesn’t work very well. I’ve only used it two or three times. Personally I don’t like it very much. I’d much prefer face to face interaction. I find it quite awkward, with no video link to see the other person’s face. I use it in the context of the European project meetings where most participants are non-native English speakers so you can imagine audio contact provides much scope for ambiguity and uncertainty. It doesn’t work terribly well in that context.”*

## Appendix 3: Focus Groups Results

Two focus groups were carried out with individuals from both offices previously interviewed about their i-skills. What follows are the findings of those focus groups, namely the comments and topics raised by the participants in their discussions. The results of both focus groups have been grouped under four themes, as derived from the data set gathered from participants in both groups.

### 3.1 Influence of the workplace on i-skills development

Participants described how the structure and culture of an organisation has a direct influence on how they perceive and develop their i-skills.

The dominance of email as a communication tool, chronic time pressures, and lack of suitable physical space were all cited as reasons for a decline in the amount of face-to-face interaction and discussion in the workplace. This was seen as a real problem which required action on a local and institutional level:

*“We create a physical meeting when we put on lunch and pay for it, to actually get people to come together who wouldn’t normally do so. We have to physically create that environment or it wouldn’t ordinarily happen.”*

*“E-mail is very useful for all sorts of things, but sometimes you can’t beat meeting someone face-to-face. You can achieve a lot more in a meeting than in a phone call.”*

*“...we need to encourage social interaction.”*

Poor, or non-existent staff rooms were quoted as a problem for both offices, as was the fact that lunch and coffee breaks were frequently skipped due to work pressures. These factors prevented staff working in different offices of the same team from coming together in an informal network. One of the focus groups also highlighted that their team was divided between two different buildings, further mitigating against networking and collaboration.

A University-wide staff common room was seen as exclusive, confirming the suspicion that networking is not recognised as of any real importance to administrative staff;

*“Its only for academic and related staff, and I think that’s wrong.”*

Developing external networks was also seen as important, particularly in terms of meeting those in similar roles at other higher education institutions;

*“Because we’re not in financial competition with other institutions (within the sector) what you can do is call on advice from other institutions, last week we were at [name of institution] because they have already brought in a...system that we’re bringing in, just to go and see how they’d done it.”*

Electronic discussion groups were said to be generally too broad to be of everyday relevance and use, and were not valued as networking tools by most of the participants.

### 3.2 Drivers for staff development

Focus group participants had a variety of motivations for seeking development in their i-skills, and for engaging in other kinds of related staff development.

Instances of uncovering unconscious incompetence in shared work situations were clearly described in the focus groups. Observing the skills of colleagues triggered an understanding in some participants that they could benefit from harvesting the knowledge of those working around them, and one participant described how skills can often be obtained quickly from colleagues on-the-job:

*“I’m afraid for me, a lot of it is quite reactive; I’ll see something and think, I need to follow that up. I’ll see someone do something and think, how did you manage that?”*

Participants also discussed how internal networking with colleagues can highlight new ideas or developments which can then be investigated further:

*“Through networking in the office, your need for information is highlighted to you and then you respond to it.”*

Time away from the office for skills development was thought to be something that may be institutionally frowned upon, and sometimes perceived to be impossible.

*“We don’t have the opportunity as a team to close the office and go out for an away day for sharing and team building. It would be nice.”*

*“It’s not true that it is impossible to go away, we choose not to because we feel we shouldn’t”*

*“We feel we should have an open door 5 days a week.”*

Obtaining a qualification through professional development is a significant motivating factor for staff development, and the benefits of undertaking this kind of training were clearly underlined by the second focus group:

*“If you need to develop your...skills, you can do the qualification, which I have actually done at work. Skills learned during that training have helped me to move roles within the organisation as well.”*

*“A qualification doubles your salary.”*

In practical terms, participants had a range of ideas relating to how institutions could foster the i-skills development of their staff:

- Constantly update staff development unit provision in response to local working environments.
- Ensure that all staff are regularly informed of the professional development opportunities available to them.
- Release people willingly for training; e.g. Going on a course:  
*“...might involve afternoon or day release and that can be frowned upon sometimes. So the local manager has to make a decision and work around the system possibly.”*
- Managers should have a flexible training budget to accommodate expensive qualification and certification courses, and easier access to that funding:  
*“The way the training budget is constructed is quite short sighted.”*
- Participants felt strongly that professional development should be promoted more robustly within the institution. Currently it was felt to be offered when requested and that there was no formal skills package to engage with, unlike academic staff who were required to attend a series of workshops and courses:

*“Professional development is often not promoted by the institution...you know that the training is there, but you’re not necessarily encouraged to take it up.”*

- Reflecting on i-skills development was a process that participants wanted to engage with, and suggested an i-skills audit could form part of annual appraisal to identify gaps and possible ways to fill those gaps. It was also indicated that reflecting on general staff development was lacking in both offices interviewed, and that attending training is no guarantee that the skills required have been learned.
- Instating annual appraisals across the institution was considered a good way for managers and staff to identify their i-skills needs.
- Skills self-development materials could be made available for teams in common areas (e.g. intranets).

### **3.3 Means of developing i-skills**

When asked how they went about developing skills at work, focus groups featured discussions about an array of possibilities and contexts for this development. These ranged from ad-hoc and informal methods, to highly structured, planned events.

The process of finding out about i-skills development opportunities was also discussed, and participants mentioned a number of methods they used to do this:

- Printed and electronic professional development skills courses lists (internal)
- Professional development skills courses lists (from external professional associations and bodies). Including certificated courses and qualifications, and paid for events and courses
- Asking colleagues for information about appropriate courses
- ‘The grapevine’
- Library training information
- Mailbases, lists, Jiscmail, and mailing lists of professional bodies or associations
- Internet searching for the skill in question
- Senior colleagues often pass on information about professional development courses to those in their team

Different types of development interventions were seen as valuable in different situations, and for different subjects. Individuals also had preferences for their own development:

- *“...going on a course, you can lose some of the context.”*
- *“I think training courses are quite nice to attend, they bring things back into focus and make you think about certain issues.”*
- *“I would want something in writing to have to refer to on the legal question[s].”*
- Trial and error experimentation (when for example, learning a new software package)
- Asking colleagues who have the skills required or finding an ‘expert’ whether internally or externally:  
*“Usually I go and ask someone who knows how to do the thing I need to do.”*
- Professional development events and undertaking qualifications (including paid for events and courses). The requesting of bulk training for a group of staff was something that one office had made use of:  
*“We recently did set up a series of Excel courses through Professional Development when we were aware that there were a number of us needing a specific skill”*

- Web searching to find information was a commonly reported activity:  
*“If I can’t find something I often try the internet.”*
- Consultation of other institutions to discover best practice
- Networking in a variety of contexts was frequently mentioned by participants in both focus groups
- Professional reading:  
*“We do occasionally read! Most professional updates come via magazines, and they come to the office.”*
- *“I still think it comes down to the individual and how the individual works.”*

Where training courses were mentioned, focus group attendees identified several factors likely to affect their decision to attend:

- Relevance to daily work:  
*“The other thing is if I’m going to use the new software every day, if you don’t you forget the training so it has to be usable at the time.”*
- Format of training (face-to-face training preferred particularly for IT applications)
- Time of year
- Whether the training was mandatory or voluntary
- Relationship of the training to promotion or salary
- Length of the training on offer:  
*“We would take into account the length of the training, if it was 2 hours, that would be a good way to get the information quite quickly.”*

Staff development interventions, particularly training courses were more likely to be utilised by focus group attendees if they came from a ‘trusted source’. Professional associations and bodies such as ARMA, were often mentioned in preference to staff and professional development units as a training provider:

*“...their courses are relevant to our jobs.”*

*“I would turn to professional development courses rather than the University, as my first port of call.”*

### **3.4 Reflection/Reviewing i-skills development**

There was little evidence that either office had made reflection on i-skills development a regular part of working life, though focus group participants did express a desire to engage in more reflection on their professional development. Methods used for reflection on and reviewing of i-skills were variable not only between the two offices, but also between individuals.

Keeping records of staff development for annual review and updating CVs were both mentioned by several focus group participants:

*“...I keep a record of the skills that myself and colleagues acquire for Professional development process for annual appraisal. Previous experience is recorded to build on.”*

*“The only time I would record what skills I had developed would be for a job description I suppose, or my CV something like that, but I don’t return to it on a regular basis unless I have to ‘cos [sic] I don’t like doing it!”*

*“Until I qualified I had to keep a log of experience I’d gained which was updated as I gained more experience. That was over a 3 year period. Once that was finished, that was ‘job done’ sort of thing.”*

Storing information about i-skills and other types of staff development undertaken by individuals appeared to be less important to participants:

*“I tend to write a lot of things down. I do keep a diary...If I don’t write things down I tend to forget. I don’t tend to use my computer as a diary.”*

*“I don’t formally write skills down as a record. I keep a folder of courses I’ve attended, but I don’t go back through it and think, oh, I haven’t got skills in that area, I’d better go on a course.”*

Individuals who did keep records of their development rarely returned to it on a regular basis:

*“If I’ve forgotten how to do something that was in the training materials then I might go back to it, but I can’t think of an occasion on which I’ve done that!”*

Both of the offices taking part in the focus group reported that there was no formal mechanism for recording any staff development attended by members of their teams, and one office indicated that staff appraisal had not been carried out in their team for four years. One office did have a system of task lists associated with individual job roles, maintained by the role holder as a means of succession or absence planning.

## Appendix 4: Focus Group Questions

- Thinking about your previous experience, when there are skills that you want to develop at work, how do you go about doing that?
- How do you find out about the opportunities available to you in terms of developing your i-skills?
- Do you keep a record of the skills you develop as part of your work? If so, do you return to it on a regular basis?
- If you were improving skills such as ‘time management’ or ‘dealing with information overload’, would you prefer to, for example, read a book on the topic, use a ‘top tips’ guide, attend a training event, watch a TV programme about it or work through an online course?
  - If it was ‘legal and ethical issues’ would your answer be different? How do you prefer to develop those skills?
- If you were being offered training in the use of new software or a web based tool, what would be the most important factors which would influence your take up of training?
- ‘Social networking’ features strongly in the research findings. What do you think the institution should do to facilitate social networking in a work context?
- What do you think your employer can do to help you develop your i-skills in relation to your job?

## Appendix 5: Information Audit

Source of information used in order to meet information needs of job role	Please tick if you use this source	If relevant please state which source is used	Frequency of use 1. Regularly 2. Occasionally 3. Never	Confidence level 1. Very confident 2. Confident 3. Not very confident 4. Not confident	Training received in use of resource Yes/no	Would you benefit from training in the use of this resource? yes/ not sure/no
Research material						
Market research						
Statistical data						
Internally generated documentation e.g. institutional policies/internal guidance						
Professional literature						
Government publications						
Legal information						
Other (please state)						

A list of reference resources and documentation used

Resource	Please tick if you use this resource	If relevant please state which resource is used	Frequency of use 1. Regularly 2. Occasionally 3. Never	Confidence level 1. Very confident 2. Confident 3. Not very confident 4. Not confident	Training received in use of resource Yes/no	Would you benefit from training in the use of this resource? Yes/not sure/no
Printed journals						

Organisations: Professional organisations, Government bodies, Companies						
Personal library of reference sources (paper & electronic)						
General office library of reference sources (paper & electronic)						
<b>Resource</b>	<b>Please tick if you use this resource</b>	<b>If relevant please state which resource is used</b>	<b>Frequency of use</b> 1. Regularly 2. Occasionally 3. Never	<b>Confidence level</b> 1. Very confident 2. Confident 3. Not very confident 4. Not confident	<b>Training received in use of resource</b> Yes/no	<b>Would you benefit from training in the use of this resource?</b> Yes/ not sure/no
Books						
Reference materials e.g. directories						
Departmental resources e.g. websites, newsletters, reports etc.						
Manuals						
Professional magazines						
University library						
Intranet						

<b>Resource</b>	<b>Please tick if you use this resource</b>	<b>If relevant please state which resource is used</b>	<b>Frequency of use</b> 1. Regularly 2. Occasionally 3. Never	<b>Confidence level</b> 1. Very confident 2. Confident 3. Not very confident 4. Not confident	<b>Training received in use of resource</b> Yes/no	<b>Would you benefit from training in the use of this resource?</b> Yes/ not sure/no
Internet search engines						
Specific websites e.g. university website						
Newspapers						
Institutional policies/internal guidance						
Discussion lists						
Newsgroups						
<b>Resource</b>	<b>Please tick if you use this resource</b>	<b>If relevant please state which resource is used</b>	<b>Frequency of use</b> 1. Regularly 2. Occasionally 3. Never	<b>Confidence level</b> 1. Very confident 2. Confident 3. Not very confident 4. Not confident	<b>Training received in use of resource</b> Yes/no	<b>Would you benefit from training in the use of this resource?</b> Yes/ not sure/no
Electronic journals						
Current awareness						

services/Alerting services						
Email						
Subject gateways e.g. SOSIG						
Blogs						
Databases						
Colleagues in your department,						
<b>Resource</b>	<b>Please tick if you use this resource</b>	<b>If relevant please state which resource is used</b>	<b>Frequency of use</b> 1. Regularly 2. Occasionally 3. Never	<b>Confidence level</b> 1. Very confident 2. Confident 3. Not very confident 4. Not confident	<b>Training received in use of resource</b> Yes/no	<b>Would you benefit from training in the use of this resource?</b> Yes/ not sure/no
Employees in other departments						
Other contacts						
Other						

Are there any other sources of information you would like to have access to but currently do not have?  
Please name the sources

### A list of ICT tools used

ICT tools	Please tick if you use this tool	Frequency of use 1. Regularly 2. Occasionally 3. Never	Confidence level 1. Very confident 2. Confident 3. Not very confident 4. Not confident	Training received in use of tool Yes/no	Would you benefit from training in the use of this tool? yes/ not sure/no
<b>Hardware</b>					
PC					
Printer					
Scanner					
Laptop					
Palm top					
Tablet PC					
Photocopier					
Fax machine					
<b>Software</b>					
MS Office Word					
MS Office Access					
MS Office PowerPoint					
MS Office Excel					
MS Office Outlook					
MS Office Front Page					
<b>Systems</b>					

## Appendix 6: Critical Incident Technique

1. Name:

2. Department:

3. Role:

### Situations

4. Think back over your time employed in the role of \_\_\_\_\_.

Without going into too much detail can you think of a time when you had a problem, a difficult decision, a particular situation where you needed information to answer a question? How would you describe that situation? What were the general circumstances leading up to that situation?

### Gaps

Turning to your information needs.

5. Thinking about this situation what happened? How much did you know about this situation/problem?

6. What did you need to find out? What questions cropped up? What were the important things you wanted to find out?

7. How important was it to have this information?

8. How did you get the information/where did you go to find out/how did you know where to go [What helped to solve the problem? what was the solution? what ways of help?]

9. Why did you choose this way to get the answer?

10. Did you get complete or partial information? [Did you fully resolve? Did you get a full answer?] Did you find what you wanted? What would have been useful? What kind of information did you or would you have used?

**[What didn't work so well?]**

11. Did you see anything in particular as a barrier/constraint in finding this information? [What stopped you finding out? What was difficult in finding out? What obstacles did you face?]

**[What did work?]**

11. Did you see anything in particular as helping? What?

12. At the end of the day how did you feel about the situation?

### Uses

13. How did you use the information? What difference did it make?

Did you expect the information to help? [Did you expect the answer to resolve the problem?] and did it help in ways you expected or in other ways?

**14.** Did you expect the information would present problems? Were these expected problems or did the information present new problems?

**15.** How did having the information help? [How did having the information resolve the situation?]

**16.** How did the information hinder? [How did the information cause problems in any way?]

**17.** In this situation what would have helped in resolving the situation?

## Appendix 7: Information Sources

A number of sources were used by participants in both exemplifications. They are categorised as follows:

- Organisations  
Higher Education Funding Council for England (HEFCE), Higher Education Statistics Agency (HESA) and the Association Of University Administrators (AUA) were used to keep abreast of all new developments within the sector. HEFCE and the AUA were also used to access background information. The AUA was used by members of staff within both exemplifications for task related enquiries.
- Internet  
The web sites of the three organisations listed above were used to access up to date information and also to deal with specific task related enquiries. The AUA and HEFCE sites were used to access background information. Loughborough University website was also used mainly for background information on staff, faculties and research groups.
- Newspapers  
The Times Higher Education Supplement (THES) was read to keep up to date with new developments within the sector.
- Intranet  
The Intranet was used primarily to access internal documents such as Committee Papers and to trace contact details for members of university staff.
- Corporate Information Services (CIS) finance system  
This was used to access various forms of financial data by members of staff from both exemplifications
- Institutional policies/internal guidance  
Operations sub Committee Papers
- Colleagues within the university  
All participants had contact with a range of colleagues within the university.
- Contacts from outside the university

A number of staff accessed information from personal contacts outside the university. These contacts ranged from family members who were Chartered Accountants to ex work colleagues and personal contacts that had been made through networking at various events

### Sources specific to the Finance Office

The following sources were used by the Finance Office. They are categorised as follows:

#### Organisations

- Universities Superannuation Scheme (USS)(For accessing up to date information, background information and specific task related information)
- Local Government Pension Scheme (LGPS) (For accessing up to date information and specific task related information)
- Inland Revenue (IR)(For accessing up to date information and specific task related information)
- Department for Communities & Local Government (For accessing up to date information and specific task related information)

- Universities UK (For accessing up to date information)
- British Universities Finance Directors' Group (BUFDG) (For accessing up to date information)
- Institute of Chartered Accountants of England and Wales (ICAEW) (For accessing background information)
- East Midlands Development Agency (EMDA) (For accessing background information)
- Companies House (For accessing background information and specific task related information)
- Professional Accounting bodies (For accessing specific task related information)
- British Universities Finance Directors' Group (For accessing up to date information, background information and specific task related information)
- University auditors (For accessing specific task related information)
- Tax advisors (For accessing specific task related information)
- Banks (For accessing specific task related information)
- Brokers (For accessing specific task related information)
- British Bankers' Association (For accessing specific task related information)
- Charnwood Borough Council (For accessing specific task related information)
- Customs and Excise (For accessing specific task related information)

#### Internet

- USS (For accessing up to date information, background information and specific task related information)
- Local Government Pension Scheme (For accessing up to date information and background information)
- Inland Revenue (For accessing up to date information, background information and specific task related information)
- Dept for Communities & Local Government (For accessing up to date information, background information and specific task related information)
- Universities UK (For accessing up to date information and background information)
- BUFDG (For accessing up to date information, background information and specific task related information)
- Universities & Colleges Employer's Association (For accessing up to date information and specific task related information)
- Trade Union websites e.g. Unison and AUT Association (For accessing up to date information and specific task related information)
- Companies House (For accessing background information and specific task related information)
- Customs and Excise (For accessing background information and specific task related information)
- Chartered Institute of Public Finance and Accountancy (For accessing background information)

#### Printed journals/professional magazines

- Accounting Standards (For accessing up to date information and background information)
- Accountancy (For accessing up to date information and background information)
- Accountancy Age (For accessing up to date information and background information)
- Payroll Pensions Review (For accessing up to date information and background information)
- Pension's Age (For accessing up to date information and background information)
- Pensions Manager (For accessing up to date information and background information)

#### Newspapers

- Financial Times (For accessing up to date information and background information)

#### Discussion lists

- British Universities Finance Directors' Group (For accessing up to date information and specific task related information)
- AUA (For accessing up to date information)

#### Institutional policies/internal guidance

- Committee Minutes e.g. Science Directorate minutes

### **Sources specific to the Research Office**

The following sources were used by the Research Office. They are categorised as follows:

#### Organisations

- Association of Research Managers and Administrators (For accessing up to date information, background information and specific task related information)
- Research Councils(For accessing up to date information, background information and specific task related information)
- Dept of Trade & Industry (For accessing up to date information, background information and specific task related information)
- Department of Health (For accessing up to date information, background information and specific task related information)
- Rolls Royce (For accessing up to date information and specific task related information)
- British Aerospace (BAE) (For accessing up to date information and specific task related information)
- European Commission (For accessing up to date information)
- Office of Naval Research (US) (For accessing up to date information and specific task related information)
- JCB (For accessing up to date information and specific task related information)
- Glaxo Smith Kline & Beecham (For accessing up to date information and specific task related information)
- Ministry of Defence (For accessing up to date information and specific task related information)
- Dept for Education & Skills (For accessing up to date information and specific task related information)

#### Internet

- Association of Research Managers and Administrators (ARMA) (For accessing up to date information and specific task related information)
- Various European Commission websites e.g. Community Research and Development Information Service(CORDIS) website (For accessing up to date information and specific task related information)
- UK Research Office website (For accessing up to date information)
- UK Research Councils (For accessing up to date information and specific task related information)
- Medical Research Council (MRC) (For accessing up to date information and specific task related information)
- Economic & Social Research Council (ESRC)(For accessing up to date information and specific task related information)

- Office of Science & Innovation (OSI)(For accessing up to date information and specific task related information)
- Higher Education and Research Opportunities (HERO) (For accessing up to date information)
- UK Council for Graduate Education (UKCGE)(For accessing up to date information)
- Engineering & Physical Sciences Research Council (EPSRC)(For accessing up to date information and specific task related information)
- Arts & Humanities Research Council (AHRC)(For accessing up to date information and specific task related information)
- Department of Trade & Industry (DTI)(For accessing specific task related information)
- MOD For accessing specific task related information)
- Dept of Wages & Pensions (DWP) (For accessing specific task related information)
- DfES (For accessing up to date information and specific task related information)
- Rolls Royce (For accessing up to date information and specific task related information)
- BAE (For accessing up to date information and specific task related information)
- JCB (For accessing up to date information and specific task related information)
- Glaxo Smith Kline & Beecham (For accessing up to date information and specific task related information)

#### Printed journals/professional magazines

- Journal of Research Administration (For accessing up to date information)
- Perspectives: Policy and Practice in Higher Education (For accessing up to date information)
- Research Fortnight(For accessing up to date information)
- Research and Technological Development (For accessing up to date information)
- Magazines from Research Councils and charitable organisations (For accessing up to date information)

#### Newspapers

- Guardian Online (For accessing up to date information)
- Guardian Education (For accessing up to date information)

#### Discussion lists

- ARMA JISCmail (For accessing up to date information and specific task related information)
- RAE (For accessing up to date information and specific task related information)
- Research Councils UK (For accessing up to date information and specific task related information)
- Universities International Team of Experts (UNITE) (For accessing up to date information and specific task related information)
- Midland European Liaison Officer's Group (For accessing up to date information and specific task related information)

#### Current awareness services

- Community of Science (COS) (For accessing up to date information)

#### Reports

- E.g. from Evidence UK (For accessing background information)

#### Manuals

- RAE Handbook (For accessing specific task related information)
- Research Activities Survey (RAS) Handbook (For accessing specific task related information)

Institutional policies/internal guidance e.g.

- Policies relating to employment of researchers (For accessing specific task related information)
- Whistle blowing Policy (For accessing specific task related information)

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