Higher Education Training Needs Analysis

October 2004

Survey for Senior Management

Introduction

This section of the survey was designed to look at the training needs of Senior Management Staff within the surveyed institutions, every one of which was represented among the 84 responses received. However, it should be pointed out before we begin the analysis of this cohort that the 17 responses received from the University of Edinburgh – 20% of all received – may serve to bias the perspective presented here in terms of the larger institutions and their needs. Full details of responses by institution can be viewed in Table 1.

Section 1: Your Post

Question 1: Institution

Institution	No of Responses	Percentage
University of Aberdeen	3	4
University of Abertay Dundee	1	1
Bell College	1	1
University of Dundee	2	2
Edinburgh College of Art	1	1
University of Edinburgh	17	20
Glasgow Caledonian University	5	6
Glasgow School of Art	3	4
University of Glasgow	4	5
Heriot-Watt University	1	1
Napier University	4	5
The Open University in Scotland	4	5
University of Paisley	7	8
Queen Margaret University College	1	1
Robert Gordon University	4	5
Royal Scottish Academy of Music & Drama	4	5
Scottish Agricultural College	6	7
University of St Andrews	6	7
University of Stirling	1	1
University of Strathclyde	3	4
UHI Millennium Institute	4	5
Not specified	2	2
Total	**84**	**100**

Table 1: Responses from individual institutions

Question 2: Basic facts about respondents

As can be seen from Figure 1, males are slightly more common at this level than females. Turning to look at the age distribution, the spread is typical of the rest of the survey. While there are no staff recorded in the category under 30, nearly 80% of all respondents fall between the ages of 40 and 59.

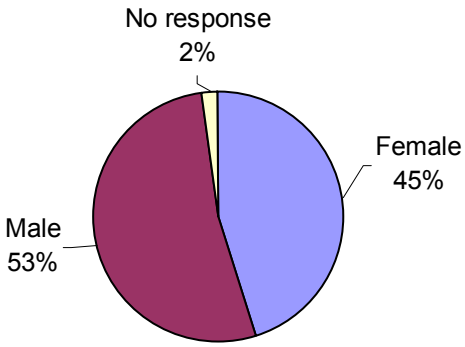

Fig 1: Staff responses by gender (N=84)

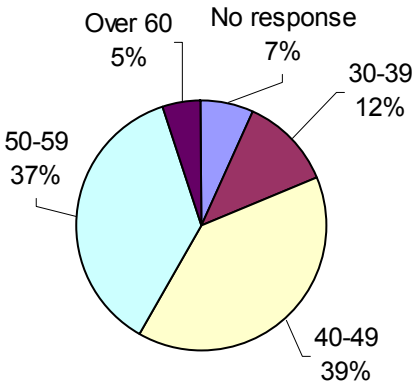

Fig 2: Staff responses by age (N=84)

Question 3 to 5: Work categories and job titles

Respondents were requested to choose a work category from a list of 5 supplied. 'Head of Section/Teaching Unit' was slightly the most frequent choice, but a comparatively large number of respondents did not see their work category included within the examples supplied so selected 'Other'. The responses gathered are illustrated in Figure 3.

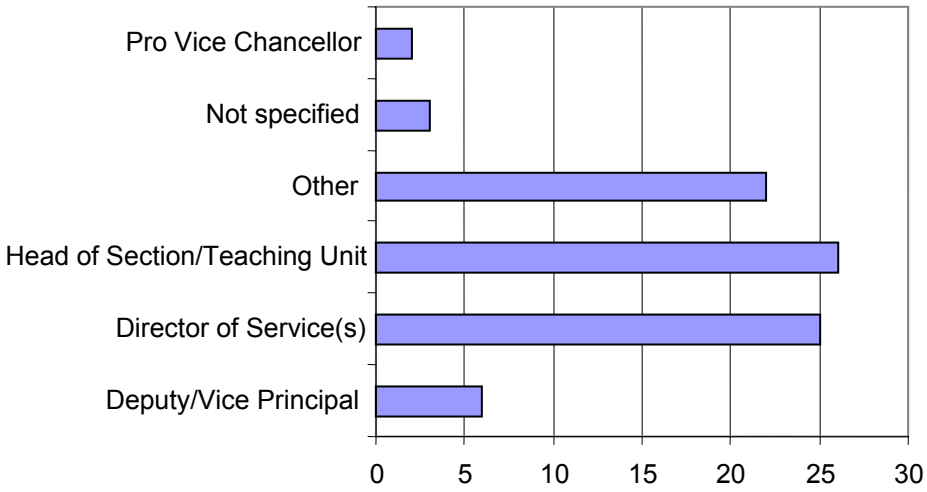

Fig 3: Which management category best describes your post? (Instances, N=84)

When asked to supply their job title as free text, several respondents offered traditional academic titles such as 'Registrar' or 'Dean', but there are other titles – and these are in the majority – which might appear in any variety of modern business such as 'Director' or 'Manager'.

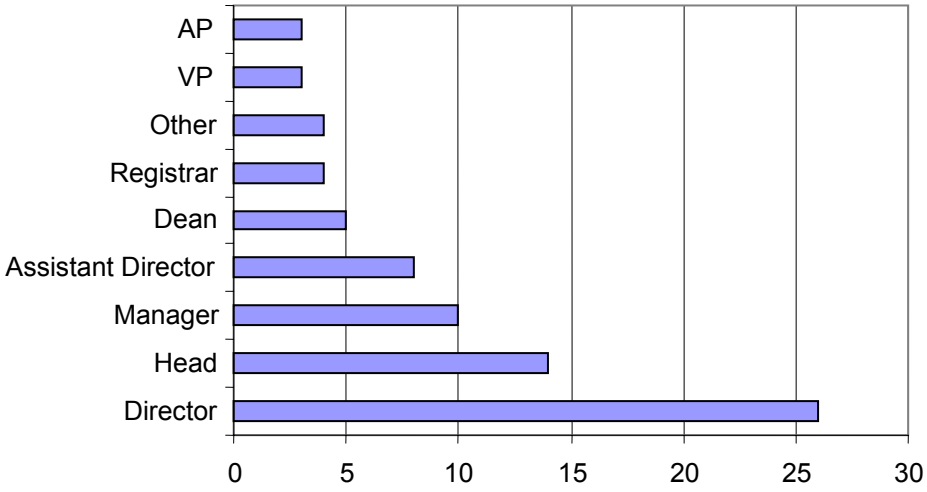

Fig 4: Job titles (Instances, N=84)

Questions 6 and 7: Staff directly managed

Most respondents in this section of the survey directly managed fewer than 20 staff and indirectly managed close to twice that number. Perhaps not surprisingly, the vast majority of staff who completed this version of the survey were full-time, permanent employees.

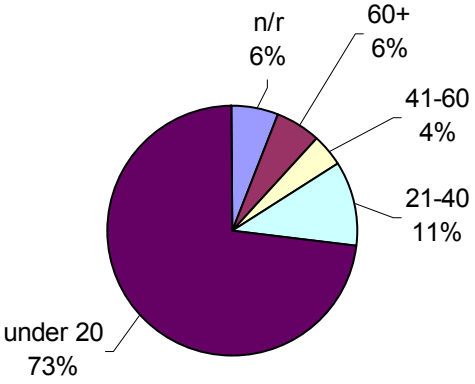

Fig 5: Staff directly managed (N=84)

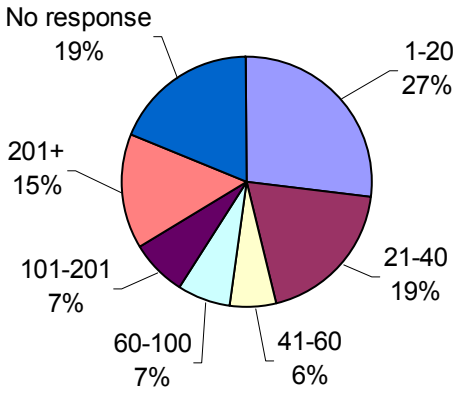

Fig 6: Staff indirectly managed (N=84)

Question 8: Qualifications in online learning

The final question in this introductory section asked if respondents held or were currently studying for any qualification in online learning. Only 5 responses were recorded here and no pattern emerges from this small sample.

Section B: Using Computers in your Work

Question 9: Access to computing technology

Do you…	Yes%	No%
…use a computer to manage your area of responsibility?	98	0
…feel your capabilities are limited by the power of your computer?	15	82
…feel confident using computers in your work?	95	2

Table 2: Access to computing technology (N=84)

Question 9 clearly shows just how integrated into the process of management information computer technology has become. It also shows – and this is a common feature of all aspects of the survey – that the vast majority of the sample is confident in their ability to use computers and that the equipment they use is more than adequate to the demands made upon it.

Question 10: Using computers

The first three answers in Table 3 show the dominance of technology in the location, creation and communication of data. The rapid decline in the response rate in the second half of the question merely indicates that for the most part managers did not have or need access to finance and HR systems or they delegated any need to interrogate those systems to others when necessary. There was also some expression of dislike for online discussions groups, thus accounting for some of the negative input in that column

In the context of your work, do you use computers …	Yes %	No %
…to find information or resources?	98	0
…to create information (documents, reports, presentations, resources)?	98	0
…to disseminate information by email?	98	0
…to disseminate information through online discussion groups?	57	40
…to access your institution's Human Resources Systems?	54	44
…to access your institution's finance system?	54	44

Table 3: Use made of computers (N=84)

Question 11: Reasons for not using computers

Where a 'No' appeared in an answer to question 10, staff were asked to provide further information on their negative response. 15% cited 'lack of resources', while 21% referred to a lack of training. A further 25 free text answers were received here, mostly of a prosaic nature and falling into no particular pattern.

Question 12: Computers at home

The next set of questions looked at computing away from the workplace and how this has spread to the home.

Do you …	Yes %	No %
…use a computer at home?	92	5
…use it for work-related activity?	88	5
…have internet access at home?	88	8

Table 4: use of computers and internet access in the home (N=84)

Computers at home are near universal among this group and nearly 90% of those who responded do use the technology for work-related activity, exactly the same number as report having internet access.

Broadband home connection is still relatively slow in spreading among this group with only just under 30% being connected in this way, as presented in Fig 7.

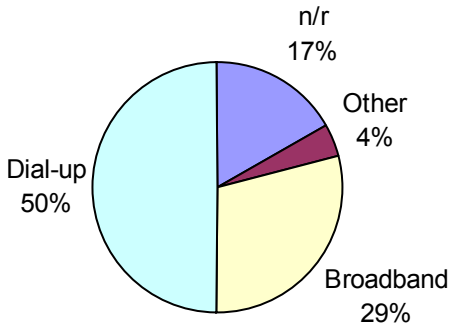

Fig 7: The types of internet connection used at home (N=84)

Section C: Video Conferencing (VC)

Question 13: Uses made of video conferencing

This set of questions is a common element in all flavours of the HETNA survey and this cohort of staff proved to be the most frequent users. VC is a technology which has been in place long enough now potentially to have become well embedded, though, as cited in the SCOTCIT Report[1], problematic access to it and lack of adequate training may be part of the reason why it has become only partly so. Despite this, four out of five managerial staff surveyed had access to a videoconferencing suite, and just over half used it sometimes or frequently (as presented in Table 5, below).

[1] http://www.scotcit.ac.uk/

As might be expected, given the relative newness of the technology, the usage figures for desktop video conferencing are even lower than those for the more traditional VC suite use.

Do you have access to a video conferencing suite?	Yes%	No%	Don't know%
	81	10	7
How often do you use the video conferencing suite?	**Never%**	**Sometimes%**	**Frequently%**
	35	33	19

Table 5: Access to and use of videoconferencing suite

Do you have access to desktop video conferencing?	Yes%	No%	Don't know %
	19	75	4
How often do you use desktop video conferencing?	**Never%**	**Sometimes%**	**Frequently%**
	18	8	2

Table 6: Access to and use of desktop videoconferencing

Do you use video conferencing to…	Yes%	No%
…communicate with staff in another part of your own Institution?	32	42
...communicate with local external contacts/bodies	23	48
...communicate with national external contacts/bodies	30	43
...communicate with international external contacts/bodies	25	48
…reduce travel to other venues	37	36

Table 7: Using videoconferencing to communicate (N=84)

The supplementary question in this section probed the uses to which staff put the technology and the most common response was to reduce the amount of travel necessary.

Section D: ICT/ILT Strategic Decisions

Question 14: Strategic Decisions

This section of the survey is unique to the senior management survey instrument and reflects the expectation that this group of staff has a strategic responsibility for the implementation of technology within their department or school as well as being active users of it. Yet strategic decisions in a fast-moving area such as this are notoriously difficult to make. The technology and its application changes constantly and therefore it is difficult if not impossible for any single individual to make a decision based on wholly accurate information. Of the sample portrayed at Table 8, the responsibility for the development of ICT/ILT strategies seems to be a shared one in the majority of cases. However, nearly half of this sample feels the need of more information to reach an informed decision.

	Yes %	No %	Partly %
Are you the primary decision-maker for strategic developments in ICT/ILT?	11	86	-
If not, is this a shared responsibility?	61	21	-
Are you well enough informed to enable correct decisions to be taken?	35	12	48

Table 8: Responsibility for strategic decisions (N=84)

The importance of this fact is amplified by the results in Table 9 as nearly two thirds of those sampled are involved in the decision-making process for the development of major information systems across the range of activities within their institutions.

Question 15: the design and implementation of information systems

The majority of this staff cohort is also involved in the creation of the overall information systems strategies which shape developments within their institutions and therefore clearly need to be as well-informed as possible.

Are you…	Yes%	No%
…responsible for, or involved in, decisions on how to implement or upgrade new Institutional Information Systems (eg Student Records, MIS, Finance, VLE)?	63	33
... responsible for, or involved in, setting your Information Systems Strategy?	55	42
...involved in the specification and/or procurement of new Information Systems?	48	48
...responsible for project managing the implementation of new Information Systems?	31	63

Table 9: Involvement in the design and implementation of information systems (N=84)

Question 16: Training Needs

The next set of questions therefore looked in detail at the areas where more training for this level of staff might be required. The question was split into three sub-sections which covered questions of ICT Strategy and Infrastructure, Management Information Systems and Legal Issues arising from new technologies and recent government legislation. In the table below, these areas are separated out and sorted in terms of the demand for training recorded.

Would training in the following areas be useful to you?	**Yes %**
ICT Strategy and Infrastructure:	
Potential benefits offered by new technologies?	63
Strategic application of ICT in your institution?	38
Project management?	32
Developing ICT Institution infrastructure (including VLEs)?	30
Devising an ICT strategy?	26
Designing an information intranet?	25
Management Information Systems:	
Implementing new Management Information Systems	32
Specifying and procuring new Management Information Systems	31
Legal Issues:	
Implications of the Freedom of Information legislation?	54
Implications of the Data Protection Act?	46
Implications of the SENDA accessibility legislation?	38
Intellectual Property Rights?	37
Plagiarism?	27

Table 10: "What sort of training would most benefit your work?" (N=84)

The area where the highest demand was registered is in the potential benefits offered by the introduction of new technologies. In an area in which technology changes so rapidly and where staff are charged with the development of strategies to incorporate it, then there is clearly a need to continually review technologies which are at the 'cutting edge' of development to determine whether they are suitable for incorporation into future plans. Nearly two thirds of the sample requested this kind of training and an examination of its benefits while nearly forty per cent requested training in the application of that technology within their own institution. Other returns in this section fell some way below this peak of demand, suggesting that this training might be more appropriate to the operational level of implementing ICT systems rather than to the strategic level. A similar pattern can be noted in the responses concerning the specification and implementation of Management Information Systems.

Other areas of high demand appear when we come to consider the legislative framework which regulates access to information within organisations. Clearly there is a great deal of concern over the Freedom of Information Act and how it will be applied, reflected in the fact that over half of the sample felt they would benefit by some training in this area. Similar concerns arise over the Data Protection Act. There is also concern in the other areas mentioned, if less intense. Finally, it may appear surprising that plagiarism seems to cause such a small amount of concern (attracting only half the returns of FOI) but it is likely that this area lies more directly with academics and administrators and is outwith the immediate responsibility of this particular group.

Question 17: Training related to online learning

Would training in the following areas be useful to you?	Yes%	No%
Managing cultural change	74	17
Online management issues (eg assessment, finance, quality assurance systems)	64	18
New technological methods and techniques	63	18
Promoting the use of information and learning technologies	60	20
Disability access requirements and assistive technology	42	32
Interoperability standards	25	44

Table 11: Training needs with respect to online learning (N=84)

In looking at online training specifically, as this question does, then major strategic issues arise once again. In a period of rapid change the need to manage and channel that change becomes paramount, thus explaining the demand recorded by three quarters of the sample for training in this area. Once again, this is accompanied by concerns about the implications of the use of new technologies and specifically how the use of these technologies will impinge on management functions.

Section E: Methods of Training and Support

Question 18: Methods of training and support found to be most suitable

As with other varieties of the HETNA survey, the final section looks at preferred methods of training delivery rather than the content of the training itself. The group was first asked to consider the composition of training groups and whether these should be restricted to senior managers only. The results of the first two suggestions may look contradictory here, but the respondents were asked which methods would be 'suitable' so a correct interpretation of the data gathered is that both manager-level training *and* mixed staff groups are considered suitable by a large majority of respondents.

Methods of training	Yes%	No%	N/R%*
Manager level only	65	23	12
Mixed staff groups	76	10	14
Traditional face-to-face workshops/courses	65	18	17
Advice by phone, electronic mail or through electronic discussion lists	46	33	20
'Blended' model (face-to-face workshops & open/flex learning supported online)	75	13	12
Open and flexible learning delivered and supported wholly online.	50	30	20

* N/R - No response

Table 12: Acceptable training methods (N=84)

The remaining four suggestions are the ones which commonly appear across the HETNA survey variants and the pattern here enhances that seen elsewhere in the analysis. Here the 'blended' model, mixing traditional face to face with other methods of support comes out well ahead of the basic traditional model. Not only is the traditional model chosen as 'suitable' by a smaller percentage of the sample than blended, but nearly twenty per cent of the respondents actually reject it as *un*suitable, a higher percentage than elsewhere in HETNA.

Question 19: Other training needs related to the management of ICT

The final question of the survey followed up by asking whether there were any other training needs which had not yet been mentioned. Six responses were received and each one was unique, making it impossible to identify a common thread. One wanted more information on change management and another on how to build business cases on the implementation of new technology. A third wanted to know how to stimulate active discussion of pedagogical issue and a fourth wanted to know more about the experience and any good practice from other institutions in developing and implementing ICT systems. Finally, one person requested training in the area of desktop video conferencing.

Conclusions

1. The gender balance of respondents was reasonably close to being even (M: 53%; F: 45%).

2. 81% were over 40.

3. Managers directly managed on average fewer than 20 staff, though they indirectly managed more than twice that number.

4. Almost everyone (98%) used a computer in some way to manage their area of responsibility. An almost equally high figure were confident in doing so.

5. Most of all, managers used computers to: find info, create info, or disseminate info.

6. Very high percentages both had a computer at home and used it for work-related activity.

7. Just over half of senior managers use VC technology sometimes or frequently.

8. Key training needs identified:

    - Briefing on the implications of emerging technologies
    - Understanding the benefits offered by the introduction of new technologies
    - Legal issues, such as Freedom of Information.

9. Various categories of training were offered, the most popularly requested was managing cultural change. The most infrequently selected were training in connection with disability access requirements and interoperability standards.

10. With respect to receiving training, managers favoured a blend of online and face-to-face methods. Two thirds of managers found it acceptable to receive training in groups with management-level colleagues, but three quarters of respondents were also happy to receive training in mixed staff groups.