

Higher Education Training Needs Analysis

October 2004

Survey for Administrative and all other Support Staff

Introduction

This section of the survey produced the second largest cohort of responses – 1200 in total. As in the academic section of the survey, every Higher Education institution in Scotland was represented but the voices here fill a multiplicity of roles across universities and colleges. They do not fall neatly under convenient headings such as ‘teaching’ and ‘research’ and therefore the needs expressed might have been expected to be as diverse as the sample themselves.

Section 1: Your Post

Question 1: Institution

Institution	No of Responses	Percentage
University of Aberdeen	19	2
University of Abertay Dundee	48	4
Bell College	5	0
University of Dundee	77	6
Edinburgh College of Art	13	1
University of Edinburgh	278	23
Glasgow Caledonian University	59	5
Glasgow School of Art	28	2
University of Glasgow	245	20
Heriot-Watt University	46	4
Napier University	29	2
The Open University in Scotland	17	1
University of Paisley	29	2
Queen Margaret University College	25	2
Robert Gordon University	60	5
Royal Scottish Academy of Music & Drama	14	1
Scottish Agricultural College	30	3
University of St Andrews	42	4
University of Stirling	33	3
University of Strathclyde	86	7
UHI Millennium Institute	16	1
Not specified	1	0
Total	1200	100

Table 1: Responses from individual institutions

Question 2: Basic facts about respondents

Persons responding to the Administrative and Support Staff questionnaire were female by a large majority. The figure of 74% shown is paralleled by one other staff cohort: 71% was recorded for library and information services personnel. With respect to age, as was the case broadly with all other cohorts (except managers) the most common range was an even spread between the decades 30s, 40s and 50s.

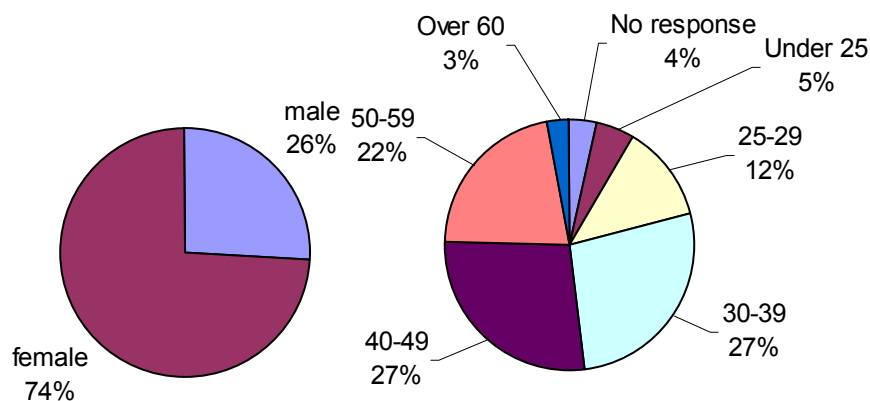


Fig 1: Staff responses by gender (N=1200)

Fig 2: Staff responses by age (N=1200)

The vast majority of staff who responded were full-time, as shown in Fig 3, and with permanent jobs, as shown in Fig 4..

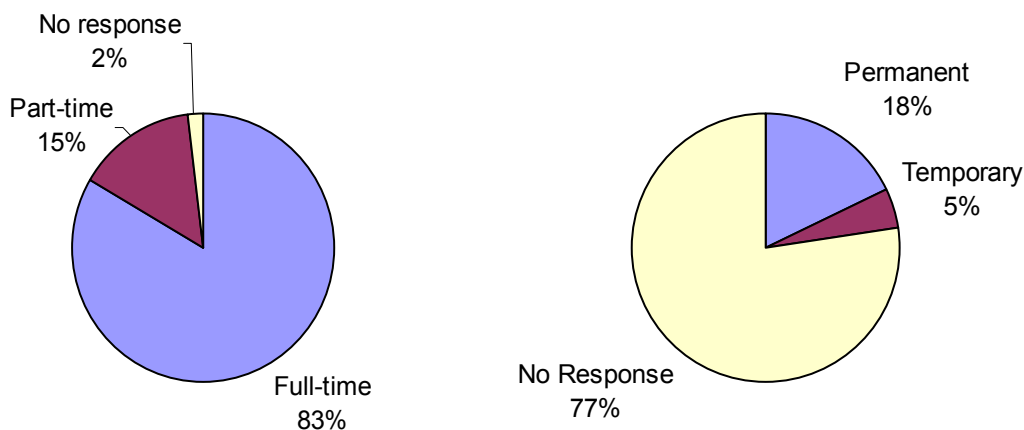


Fig 3: Full-time/part-time (N=1200)

Fig 4: Permanent/temporary (N=1200)

Questions 3 to 5: Work categories and job titles

In the next question, staff were asked to assign themselves to one of the broad occupational categories and the results are illustrated in Figure 5. On this basis more than half of those surveyed categorised themselves as 'Administrative' but this broad category revealed huge variation both of nomenclature and role across the group when this was further probed in the supplementary questions. The categories might also lead us to suppose that training demands across this cohort might be very different for different occupational groups – the training needs of those in 'finance' for example might be assumed to be very distinct from

staff in 'estates'. Descriptions of the training needs at these levels are, however, outwith the scope of this current survey.

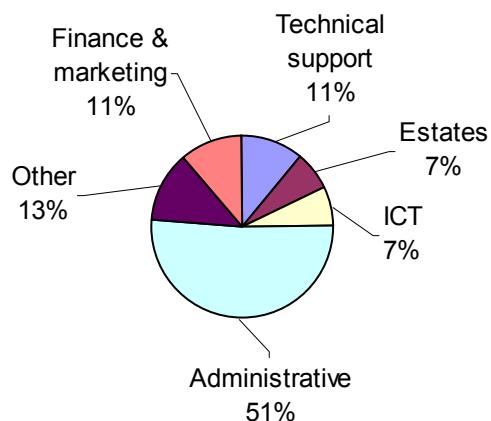


Fig 5: Chart of Administrative Staff Broad Occupational Categories (N=1200)

13% of staff saw their role as existing beyond the major assigned categories and a detailed breakdown of their responses is shown in the Table 2. While some of the roles described could have been subsumed under one of the pre-set categories the existence of this rich variety of roles perhaps indicates the mix of activities generated by the institutions surveyed and the range of skills required by staff to carry out their roles effectively.

'Other' main work area	Responses
Research Support	27
Student Services	26
Technical Support	22
Admin Support	22
Other	19
Business Development	19
Accommodation	10
Admissions	9
Health & Safety	6
Secretarial	5
Procurement	5
Planning	5
Quality	3
CPD	3
Alumni Development	3
Total	184

Table 2: 'Other' main work areas

Section 2: Using Computers in your Work

Question 6: Access to hardware and facilities

Do you...	Yes%	No%
...have exclusive use of a computer (or workstation) at work?	93	5
...share a computer with others?	14	71
...have your own email address at work?	98	0
...feel that your capabilities are limited by the power of your computer?	21	73
...feel confident using computers in your work?	95	3

Table 3: Access to equipment

The first part of this section probed access to the basic tools of the technology and looked also at perceptions of the quality of the supply and the basic confidence of the staff in using the tools. As can be seen from the results in Table 3 the results in this area were positive. Access to the technology and the ability to use it appear almost universal from these figures where 98% have their own email address at work. The power of the technology seems for the moment to be adequate to the demands made upon it by three quarters of the workforce. Finally, an impressive 95% of all respondents felt confident in their use of computers at work. Computer use is now firmly – and it would appear happily – embedded in the working lives of practically all respondents.

Question 7: Using computers for work

In common with the rest of the survey, the next set of questions turned to probe the use of the technology in more detail.

In the context of your work, do you use computers ...	Yes %	No %	N/A %
...to find information or resources?	97	1	
...to communicate with colleagues?	99	0	
...to communicate with students?	64	9	25
...to support student learning?	26	18	52
...to improve accessibility for people with special needs?	21	71	8

Table 4: Use made of computers

Some of the figures here are remarkably close to those which emerged for the academic cohort. In both groups, computer technology is a channel for the location, creation and communication of information, primarily with colleagues as evidenced by the 99% figure recorded above and in the academic survey. As might be expected here the figures for communicating directly with students and for improving accessibility are both lower for this cohort than for the academic where more regular interaction with students might be expected. This question was supplemented by a free text question where respondents were invited to describe 'other' uses they made of computer technology in the work context.

The 195 responses attracted here in many cases merely amplified or gave more detail on the major categories already cited in the earlier part of the question such as 'communication' or 'administration' – one respondent gleefully responded that the computer was used 'As a typewriter!' The types of responses are given as percentages in Table 5.

But a few trends did emerge here which are worth noting. Firstly, there is a greater emphasis on data handling and analysis than appears in some other sections of the survey. Secondly, the technology is beginning to have an impact on the procurement process. Not unique to this

group is the fact that, for a small but significant number of respondents, the computer plays a role in all aspects of their working lives.

Other uses made of technology	Percentage
Communication	29
Data Handling & Analysis	23
Administration	21
Financial	6
Procurement	4
Used in all Work	3
Support	3
Web	3
Management information	2
Other	6

Table 5: 'Other' use of computers (N=195)

Question 8: ICT skills

The next set of questions forms a common element across all five sections of the survey and investigates the existence of the key skills required to use ICT effectively. As in other parts of the survey these appear to be well-established.

I can...	do with confidence %	know how to %	would like to learn %	No response %
...store files in folders and retrieve them from a computer	79	20	1	1
...create documents using a word processing application	78	20	1	1
...create tables in a word processor	67	25	7	1
...insert images and graphics into word processing docs	53	34	10	3
...insert hyperlinks in word processing documents	39	31	24	6
...create spreadsheets (using for example Excel)	61	30	8	1
...use functions in a spreadsheet	41	41	14	4
...create databases (using for example Access)	25	36	33	6
...create presentations (using for example PowerPoint)	33	40	21	6
...use email	80	18	0	2
...attach files to an email message	79	19	1	1
...search the web for information	75	24	0	1
...create my own web pages	14	25	51	10

Table 6: ICT skills

The highest demand for training appears in the creation of web pages – cited by 51% of respondents as a skill they 'would like to learn'. It is certain that many individuals in this group perceive the increasing importance of web-based information and perhaps see an increasing role for themselves in connection with it. There is similar high interest registered in knowing how to insert hypertext links in documents.

The other area of high demand which is reinforced at other points in the survey is the desire to learn how to create databases which echoes the emphasis placed on 'data handling and analysis' in Table 5 above.

Question 9: Computers at home

The next set of questions considered home access to ICT and the internet. Over 80% of the sample has access to a computer at home, and clearly a sizeable proportion of administrative staff are in the habit of taking work home: 42% use their home computers for work-related activity. For those with home computers, a large majority of these also have internet access.

Do you ...	Yes %	No %	N/R %
... use a computer at home?	84	16	1
...use it for work-related activity?	42	42	16
...have Internet access at home?	75	9	16

Table 7: Computers in the home (N=1200)

The final questions in this section of the survey looked at two of the most crucial aspects of information and communication technology in the sector where a large amount of investment has taken place in recent years: Virtual Learning Environments and VLEs.

Question 10: Virtual Learning Environments

As with other staff cohorts, a degree of confusion is evident with respect to VLEs. Over half of the sample 'don't know' if such technology is in use in their institution. There may be another reason for this low figure in that often the version of the technology in use is known by its brand name – *Blackboard* or *WebCT* – rather than the more generic title of VLE. Whatever the reason there would seem to be a need to raise the general awareness of the technology in this area especially as the technology becomes more sophisticated and *Managed Learning Environments* eventually link up back-office functions directly into online systems for learning and teaching.

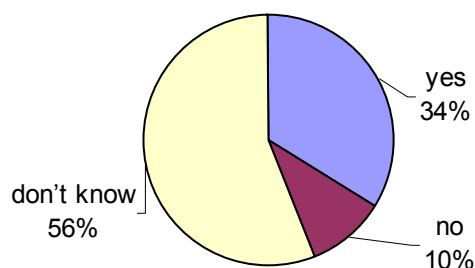


Fig 6: 'Does your institution or department have a VLE?' (N=1200)

A supplementary question here invited the third of the sample who were aware of VLE developments to identify the type of technology installed by their home institution. The results echo those from elsewhere in HETNA, confirming that this is a market currently dominated by *Blackboard* and *WebCT* but where inroads are beginning to be made by open-source platforms such as *Moodle* and *Bodington*.

VLE product	Percentage	Responses
Lotus Learning Space	0	1
TopClass	0	1

LearnWise	0.4	2
Bodington	2.1	9
iCampus	2.1	9
Moodle	3.1	13
Blackboard	41.9	173
WebCT	43.4	179
Other	6	25
Total	100	412

Table 8: VLE types installed

An open question in this section probed responses where some 'other' VLE was installed but a very low response rate is a further indication of how VLEs and the understanding of them have a very small role so far in the professional lives of this staff cohort. One trend which does match that of the academic sample is in the number of references to VLEs which have been developed in-house. Finally, there are two mentions of the new CLAN system which is being introduced by UHIMI – an event unremarked in the academic version of the survey.

A final open question in the VLE section of the survey looked at the uses to which VLE technology is currently being put. Perhaps not surprisingly the question attracted only 80 responses. These were analysed and tagged and the results can be seen in Table 9.

Use made of the VLE	Percentage	Responses
ECDL	1	1
assessment	2	2
projects	2	2
training	4	3
starting	5	4
course delivery	10	8
communication	11	9
admin	14	11
as a student	16	13
course information & materials	34	27
Total	100	80

Table 9: Uses made of the VLE

The rather patchy and disappointing response here reinforces the notion that only a very small number of administrative staff are currently using a VLE at all and where they are they are in the very first stages of doing so, as is directly admitted by some respondents. By far the largest use is in the support of courses with information - as distinct from the delivery of courses - which could probably have been achieved as efficiently using an intranet, without the additional expense of investing in a VLE. However, it is noteworthy that a large proportion of the 80 respondents had themselves used a VLE while studying.

The final question looked at VLE training and in the context of the other questions in this section delivered the entirely predictable result that only a tiny minority of staff had received any form of VLE training.

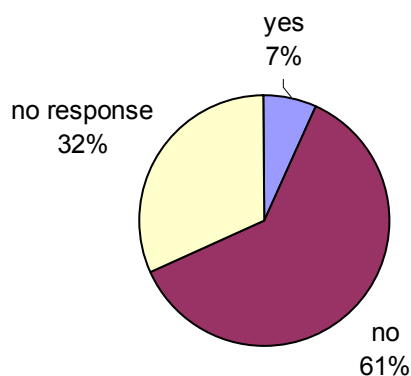


Fig 7: 'Have you been trained to use the VLE?' (N=1200)

Question 11: Video Conferencing

Administrative staff were found to have generally infrequent need of video conferencing facilities. Their access to and use of the facilities are as presented in Table 10.

Do you have access to a video conferencing suite?	Yes%	No%	Don't Know%	No response%
	44	26	29	
How often do you use the video conferencing suite?	Never%	Sometimes%	Frequently%	No response%
	38	11	2	49

Table 10: Access to and use made of videoconference suites (N=?)

Nearly a third of admin staff are unaware that videoconference facilities are available through their institution. However, even among those staff who know about it, only a tiny minority use it and an even smaller percentage claim to use it frequently.

Do you have access to desktop video conferencing?	Yes%	No%	Don't Know%	No response%
	6	57	33	4
How often do you use desktop video conferencing?	Never%	Sometimes%	Frequently%	No response%
	16	1	0	83

Table 11: Access to and use made of the desktop videoconferencing (N=1200)

The figures for desktop video conferencing show very minor usage indeed, though this is a technology which has yet to firmly establish itself in the mainstream.

The final questions about videoconferencing looked at reasons for using the technology.

Do you use VC to communicate with colleagues?	Yes%	No%		
	10	30		
Do you use VC to communicate with/teach students?	Yes%	No%	Not applicable%	No response%
	2	16	35	47

Table 12: Reasons for using Videoconferencing (N=1200)

The vast majority of the sample chose not to respond to this question but the minority who did identify 'communication with colleagues' as the only use of this technology which attracts a minimal level of usage. When this response is broken down further by the supplementary question the responses are similar to those in other sections of the survey.

Other uses of videoconferencing	Responses
Interviews	15
Communication	9
Meetings	8
Contacting Home	4
Presentation/Demo	3
Examining	1
As a Student	1
Training	1
Total	42

Table 13: 'Other' Uses of Video Conferencing

Once again the response here was very low with only 42 valid returns received. The pattern of response here matches that observed in the academic sample in that interviews and meetings were by far the most common uses and there was little or no mention of video conferencing as a delivery medium.

Section C: Assistive Technology

Question 12: Special Needs

The Special Educational Needs and Disability Act 2001 (SENDA) makes it unlawful to discriminate against people with disabilities.

This next set of questions sets out to establish the level of awareness of the obligations imposed by the new legislation in this area and of the awareness of the technologies which are available to improve accessibility. The first question shows that while close to thirty percent of the sample have some notion of the legislation and its consequences, the vast majority either provide no response or are unaware of the legislation. Although this whole area is clearly relevant to teachers or other 'front-line' staff, the legislation does impose a responsibility upon the whole organisation to ensure accessibility is optimised. It is likely that these low-awareness figures point to a need for staff development in this area.

Responses to the question about awareness of accessibility issues is displayed in Fig 8.

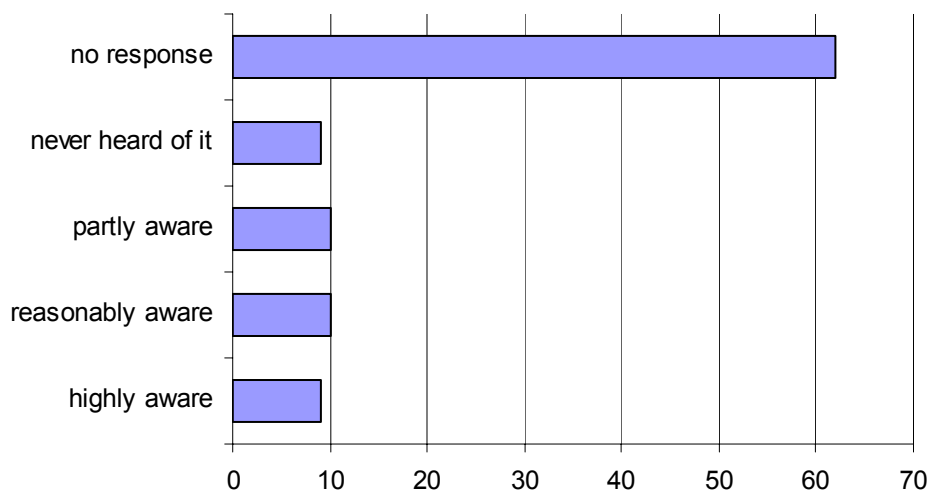


Fig 8: Awareness of SENDA (percentages)

Question 13: Assistive technologies

Question 13 looked at awareness of the range of assistive technologies which exist.

I know about...	yes %	no %	WLTL %	N/R %
...making online learning resources more accessible.	19	34	23	25
... 'accessibility options' built into the Microsoft Windows.	19	34	24	24
...adapted keyboards and alternatives to the standard mouse.	27	29	20	24
... alternative input methods (eg voice recognition, switches)	25	29	21	25
...alternative output methods (eg tactile diagrams, text-to-speech)	14	40	21	25
...screen magnification & screen reading software (eg Zoomtext)	18	37	20	25
...specialist software to support learning (eg Texthelp,)	10	43	22	25

* WLTL = would like to learn / N/R = no response

Table 14: Levels of familiarity with assistive technologies (N=1200)

Interestingly, the responses here compare similarly with those received in the academic sample of the survey. In fact, in certain areas such as adaptive keyboards and other alternative input methods more staff claimed knowledge about them than did academics. With responses routinely registering over 20%, the 'would like to learn' column here also makes a positive case for the provision of staff development in this essential area.

Section D: Staff Development and Support Needs

Question 14: IT qualifications

Do you have an IT qualification?	Yes %	No %	N/R%
	20	78	2

Table 15: IT qualifications held (N=1200)

In order to maximise the return on the technology it will be important to make sure that the workforce acquires appropriate skills. This section of the survey set out to delineate the existing skills base and to try to gauge the demand for future staff development, the type of development which would be most welcomed and the forms of delivery which would be most suited to the audience.

This first part of question 14 established that one in five of the sample had achieved some kind of IT qualification. The exact nature of those qualifications was then probed by a secondary question which invited respondents to list any qualifications they had attained in this area. This question attracted 235 responses matching our expectations of numbers from the first part. The range of responses is presented in Table 16.

Type of qualification	Responses
Degree	22
ECDL	72
Studying for ECDL	32
HNC	26
HND	9
Miscellaneous	30
MSc	11
MScIT	3
MScIS	2
PgDIT	11
PgD (other)	3
SCOTVEC	10
Microsoft	4
Total	235

Table 16: Types of IT qualification held

At first glance there is no real pattern to this table other than the fact that over 100 respondents have either achieved ECDL or are studying for the original or advanced versions. If we put this to one side, however, the other qualifications range from degrees and post graduate diplomas to school certificates. This confusion is even slightly masked here as the 'miscellaneous' section of the table has thirty entries which are all single mentions of particular qualification. ECDL may be becoming something of a standard but whether this is a positive move or not it is clear that some standard qualification is urgently needed to make sure that staff have the basic skills to carry out their jobs. This might just be a case of giving credit for skills that are already well-established – remembering from earlier in the survey that the vast majority of staff were 'confident' of their own ICT skills – but establishing some kind of common standard would be a progressive step.

Question 15: the sort of training felt to most benefit respondents' work

This training need is reflected in the next set of questions where staff were asked to select the categories which would most benefit their work. They were asked to select all those that applied. ECDL attracted over a third of the votes here, only surpassed by the desire to learn how to create web pages which is a very popular option both in this and other sections of the HETNA survey. As noted earlier, this might constitute recognition of the growing importance of web-based information and a desire to be an active participant in rather than a passive consumer of this type of communication, which is increasingly becoming embedded within administrative job descriptions.

Training need	Percentage
Creating web pages	38
European Computer Driving Licence	36
Effective searching on the web	22
Video conferencing	14
Using Email	8
Other	12

Table 17: Training needs identified (N=1200)

Having selected all that applied, respondents were then invited to identify the type of training that was most important to them out of all those selected. The prioritisation that took place is presented in Table 18.

Training priority	Percentage
ECDL	19
Creating web pages	18
Effective searching on the web	7
Video conferencing	3
Using Email	2
Other...	10

Table 18: Prioritising the training required (N=1200)

Where the supplied training categories did not fit with respondents' expectations, they were requested to identify further examples. There were 167 further suggestions received here in total, with some respondents expressing a demand for more than one type of training. Not surprisingly, the standard Office applications were by far the most popular. Within this, training on databases was generally the most frequently requested: 62 requests in total (32 for Access, 3 for Oracle and 27 requests which did not name specific software). Excel training also attracted 18 requests.

The only other major areas reinforced the trend noted earlier in that 15 staff wished to develop their web skills (a similar demand was seen in the academic survey), while 8 requested more technical network training and 7 were interested in multimedia.

Other skills needed	Responses
Access	28
Access+	4
Databases	27
Excel	11
Excel+	7
Microsoft	4

Miscellaneous	21
Multimedia	7
Networking	8
Office	3
Online Resources	2
Oracle	3
Outlook	4
PowerPoint	7
Project Management	6
Statistics	3
VLE	4
Web Skills	15
Word Processing	2
DTP	3
ECDL	5
ECDL+	2
Adobe Packages	5
CAD	3
Total	184

Table 19: Other required skills

Question 16: Specialist ICT Skills

Respondents were asked if training in a set of specialist ICT skills would be useful to them. The responses are displayed in Table 20.

Specialist ICT skills	Yes %
Web Development	40
Project Management	36
Image Editing	21
Video Creation/editing	14
Other	3

Table 20: Specialist ICT skills required (N=1200)

Once again the emphasis here is on web development skills though this is closely followed by project management. This emphasis on web development might well be in response to the recognition that the web is becoming a primary vehicle for the transmission of information and the desire – noted earlier – to play an active rather than passive role in this medium.

Of all the specialist skills selected, respondents were then asked to indicate which item was most important to them. Table 21 shows the prioritisation which occurred.

Specialist ICT skills	Yes %
Web Development	19
Project Management	21
Image Editing	5
Video Creation/editing	3
No Response	50
Other	3

Table 21: Prioritising the training required (N=1200)

At this point, the emphasis subtly changes. This time project management edges narrowly ahead of web development and these are the only two options with any real weight of support behind them.

Question 17: Methods of training and support found to be most suitable

As in other sections of the survey the next set of questions analysed preferences in terms of the delivery of training using a question common to all five versions of the survey form.

Methods of training	Yes%	No%	N/R%
Traditional face-to-face workshops/courses	77	6	17
Advice by phone, electronic mail or through electronic discussion lists	36	34	31
A 'blended' model (face-to-face workshops & open/flex learning supported online)	75	8	18
Open and flexible learning delivered and supported wholly online.	47	26	27

Table 22: Methods of training found suitable (N=1200)

The traditional model emerges narrowly ahead in the preferences expressed here but there is also considerable support for the 'blended' model. It should be noted, however, that the wholly online model is also acceptable to almost half of those who responded. The follow up question here probing 'other' methods of delivery produced very few responses and little hard evidence though there were echoes in some of the comments of a desire for good-quality paper-based training materials which echoes sentiments expressed in the Academic section of the survey.

Question 18: Factors influencing/restricting preferences with respect to training models offered

This open text question drew responses from nearly 300 respondents. Comments were tagged in line with the key elements identified in the individual comments and the resulting table appears as Figure 30. In the normal pattern which can be observed in this type of question, 'time' is as expected the major barrier, accounting for over a third of all responses. If this category is then sub-divided then some respondents have a preference for online learning (9) because of the pressures of time, while others use the same pressures to justify the choice of the more traditional model (11). Common tagging was used with this question across the five cohorts sampled so there might be room here for some cross referencing.

The other key category of responses was the preferences expressed in the comments on mode of delivery. In this section face to face (F2F) emerged as the clear winner on 63. However, it was outnumbered by those who opted for at least an element of online learning in the training mix: blend (37) fully online (32).

None of the other sections made it into double figures apart from the 'miscellaneous comments' and no common thread could be discerned running through this set of responses.

Reason	Responses
time (all)	110
time (cost)	7
time (f2f)	11
time (ol)	9
time (resources)	5
time	78

preference (f2f)	63
preference (blend)	37
preference (ol)	32
miscellaneous comments	26
resources	9
cost	2
flexibility	5
learning experiences	2
location	3
subject	2
Total	294

Table 23: Incentives and Barriers to Training Method Preferences

Question 19: Other training needs related to ICT and the use of eLearning

55 valid responses were received to the final open text question for administrative staff. This adds little to the sum total of knowledge gathered so far in the survey. Many of the comments are made once only and some of the usual suspects reappear: *Access*, *Excel*, web skills, as well as knowledge of VLE use. A need was expressed for 'general' training on how to keep up with technological developments. Staff were aware of the importance of it but despaired at the difficulty of keeping up because of the pace of change. There were also 6 staff who requested aspects of online learning pedagogy including design and moderation.

'Miscellaneous' again scored highest and no common thread could be discerned. This can be dismissed as not indicative of any trend but perhaps the plurality and the individual nature of training needs hinted at here constitutes a trend in itself.

Other training need	Responses
General	10
Aspects of E-Learning	6
Miscellaneous	12
VLE	4
Web	5
Miscellaneous	18
Total	55

Table 24: Other ICT Training Needs

Conclusions

1. The ratio of females to males in this cohort was three-to-one with age distribution very similar to that in the academic sample.
2. The vast majority have exclusive access to a computer, are happy with its specification and 'feel confident' using the technology. This is now the primary tool for locating relevant information and for communication with colleagues.
3. The basics of common office applications again seem to be well embedded. As with the academic cohort, here the greatest demand is for training in creating web pages and databases.
4. Almost 90% staff have computer access at home and half of those use their technology for work-related activity.
5. VLE technology.
 - 55% of staff did not know if a VLE had been purchased by their institution/department.
 - Where they do exist, *Blackboard* and *WebCT* are dominant vendors but there is increasing reliance on 'home grown' systems and increasing penetration of the market by open source solutions.
 - This technology so far plays very little part in the work pattern of this cohort and the fact that only 7% had received any VLE training reflects this.
 - There is a need to raise awareness of VLEs and their implications in relation to MIS.
6. Video conferencing is used infrequently by administrative staff, particularly outside the UHIMI partners.
7. Awareness of the SENDA legislation and its implications was as high as among academic staff. Clearest demand in this area was in the use of the 'accessibility' functions built into Microsoft Windows.
8. One fifth of the cohort claimed to hold an ICT qualification of which the most common was ECDL, though the latter is more accurately described as an IT rather than ICT qualification. The multiplicity of qualifications held at different levels and the 80% of staff without any suggests that a standard ICT qualification may be desirable.
9. Training Needs:
 - Highest demand was for creating web pages and ECDL.
 - Specialist demand for database training and project management.
10. Traditional methods were narrowly favoured by this group just ahead of blended delivery. Entirely online delivery was accepted by almost half of respondents. Of the barriers to the uptake of training the majority of respondents cited 'time' as the key factor.
11. A generalised need to keep up with the pace of technological development was expressed at a number of different points in the results.