

EUNIS Top Concerns Survey 2004/2005

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For the last two years UCISA¹ has undertaken a survey to determine those matters which are of most concern to its members. Like the EDUCAUSE Current Issues Survey², UCISA members help to identify those issues which may be of serious concern to their organisations and the membership are then invited to rank these. Delegates attending the EUNIS³ Meeting in Manchester in June 2005 were invited to take part in an on-line survey to rank the UCISA list of concerns so that a wider European perspective could be given on the importance of these issues. The outcome of this survey has been designated the *EUNIS Top Concerns Survey*

Delegates were asked to select no more than five issues from a candidate list of twenty seven issues in each of the following categories:

- I. Those IT-related issues which are most important for your institution to resolve for its strategic success.
- II. Those IT-related issues which are likely to become much more significant within the next twelve months.

- III. Those issues which as leaders in the provision of IT at your institution are you spending most of your time addressing.
- IV. Those IT related issues on which your institution spending the most resource (human resource and or financial resources).

This voting is based on the scheme used by the equivalent EDUCAUSE survey.

The issues coming out as those most important to the strategic success of the voting delegates' institutions were:

Rank	
1	Network Security
2	Strategic Approach to Infrastructure
2	Enterprise Portals
4	User Management
5	Anytime, anywhere computing
6	Network Technologies
6	IT Institution's planning
8	Systems resilience and availability
8	Information Security
8	Data interfaces

Those that we expect to become much more significant in the next twelve months are:

Rank	
1	Anytime, anywhere computing
2	Document Management
3	User Management
3	Information Security
5	Data interfaces
6	Network Security
6	Data Management
6	Business Continuity
6	Extended hours

¹ UCISA, University and Colleges Information Systems Association, represents the whole of UK higher education, and increasingly further education, in the provision and development of academic, management and administrative information systems, providing a network of contacts and a powerful lobbying voice. <http://www.ucisa.ac.uk/>

² EDUCAUSE Current Issues Survey is conducted annually to determine those matters of concern to its membership.

<http://www.educause.edu/apps/eq/eqm05/eqm0521.asp>

³ EUNIS The European Organisation focusing on IT services in Higher Education, and Research.

<http://www.eunis.org/>

We asked the Heads of IT Services which issues were consuming most of their time.

Rank	
1	Strategic Approach to Infrastructure
1	User Management
3	Ensuring sufficient funding
3	Departmental Relationships
5	IT Institution's planning
6	Network Security
7	Data interfaces
7	Learning support
7	Determining priorities
7	Customer Centric Service

Delegates were also asked to rank the issues by the level of resource addressing them was consuming.

Rank	
1	User Management
2	Data Management
3	Network technologies
3	Data interfaces
5	Enterprise Portals
6	Strategic Approach to Infrastructure
7	Anytime, anywhere computing
7	Systems resilience and availability
7	Learning support
7	Staffing
7	Customer Centric Service
12	Network Security

We analysed the results across all of the ways we asked our members to vote and a group of twelve issues were found to be highly ranked.

Rank	
1	User Management
2	Network Security
3	Data interfaces
4	Strategic Approach to Infrastructure
5	Anytime, anywhere computing
6	Enterprise Portals
7	Data Management
8	Network technologies
9	Information Security
10	Systems resilience and availability
10	Learning support
10	IT Institution's planning

What are these issues about?

This section provides a short summary of the twelve which were ranked of highest concern overall. The bullet-points set out what we mean by each of the Concerns.

User management

- Identification, authentication, authorisation of users;
- Intra-organisation and inter-organisation user management issues;
- Short term users, visitors etc.;
- Authorisation for use of remote resources.
- User Directories: Managing user identities through e-directories and meta directories; maintenance of multiple directories, synchronisation of directory contents.
- Single sign-on: Systems to enable users to make use of one set of credentials to access a number of different resources; users may only be challenged for credentials for the first system they access – once identification is established other systems allow access based on the authentication established

Network Security

- Hacking, SPAM, computer viruses;
- Firewalls, intrusion detection;
- Identification of security breaches;
- Authentication for use of data network; 802.11x and other mechanisms;
- Potential conflicts between open network access (to provide wide access to facilities) and security of access;
- VPNs.

Data Interfaces

- Integration of application systems;
- Inter/intra organisation data exchange standards;
- Aggregation of user interfaces through portals
- Data interfaces and exchange issues relating to
 - Unique Learner Number
 - Bologna
 - Personal Development Programme
 - e-Portfolios
 - Web Services, integration and interfaces

Strategic approach the IT infrastructure

- Development and implementation of a policy / strategic direction for IT infrastructure;
- Determining the scope of an enterprise / institutional IT infrastructure policy;

- Obtaining buy-in for the institutional IT infrastructure policy;
- Selection, deployment and maintenance of an enterprise wide IT infrastructure;
- Role of proprietary and open source elements in the IT infrastructure;
- Change control for an evolving IT infrastructure

Anytime, anywhere computing

- *Infrastructure issues:*
 - Network connectivity, network sign-in, network authentication, and accounting;
 - Network security; balance between security and convenience / ease of access.
 - Resource management in a peripatetic environment.
 - Enabling technologies for secure use and access.
- *Application issues:*
 - remote desktop e.g. file store access, document management;
 - office productivity tools e.g. CRM, MSOffice (or indeed Open Office);
 - mobile device synchronisation e.g. phones, PDAs, laptops;
 - mail system;
 - portal channel access e.g. phone, PDAs and other small display devices.
 - Off-site access to corporate information and business applications;
- Governance issues for remote use of corporate information and systems; development of institutional policies;
- Security; policies for using institutional applications and data on systems not owned by the institution; risks to institutional data held on such machines;
- Institution's rights to access / control such systems when connected to its network.

Enterprise portals, web-based services

- Justifying their need, determining benefits;
- Business strategies and web portal issues;
- Management issues, "ownership";
- Standards and implementation issues;
- Robustness.

Data management

- Storage and handling of increasingly large volumes of data; storage technologies (including reliable storage (RAID, mirroring),

SANs, virtualisation, fibre channels, SCSI over IP); backup systems.

- Data curation – provision of access to data in the future (cope with technology changes).

Network technologies

- Wireless
- The wireless media: 801.11a, 801.11b, 801.11g;
- Coverage;
- Open /closed access;
- Role
- Wireless vs wired
- Optical networking
- Standards and equipment
- Quality of maintenance and support
- Dark fibre ownership, leased dark fibre, service provision;
- Public wireless vs wired vs 3rd generation;
- Remote access from other networks;
- VPN.

Information Security

- Development of information security policies;
- Adoption and enforcement of information security policies.

Systems resilience and availability

- Conflict between service provision and the application of updates and other maintenance activities;
- Business requirements for continuous availability of services (24x365)
- Timing of maintenance activities: when is "out of hours"?
- Technologies for resilience: Layer 4 network switches and routing, system clustering for resilience, storage infrastructures, SANs. Data backup

Learning support applications

- VLE development and integration with other applications for supporting learning (such as e-Portfolios, Personal Development Programme support tools, e-assessment, plagiarism detection);
- Linking VLE to corporate information; use of VLE systems with mobile computing devices.
- Exchange of student information: Alignment for standards for the exchange of information about students within the H and FE community and with other educational bodies;
- Ongoing costs of VLE / MLE systems

Ensuring that IT is being full considered in the development and planning of our institutions.

- Changing role of ITS within the institution;
- Involvement of ITS / consideration of IT issues in development of institutional plans and developments;
- Institutional recognition and acceptance of the importance of IT in formulation of all policy issues.
- Engagement of ITS with institution at an appropriate level to ensure appropriate policy input is received from and by ITS.
- Ensuring strategic investments are made in IT to sustain the service required by the institution.

	EUNIS	UCISA
User Management	1	8
Ensuring sufficient funding		9
Data Management	7	10
IT in Institution's Planning	10	11

Three issues are not common to the highest ranked issues in both two polls. One might be a little surprised that securing funding and Information Security are not common themes (both come a few places down from the top group of issues).

Comparing UCISA and EUNIS Results

The tables below compare the overall concerns from the EUNIS and UCISA Surveys.

By EUNIS ranking

	EUNIS	UCISA
User Management	1	8
Network Security	2	3
Data interfaces	3	
Strategic Approach to Infrastructure	4	4
Anytime, anywhere computing	5	1
Enterprise Portals	6	7
Data Management	7	10
Network technologies	8	6
Information Security	9	
Systems resilience and availability	10	2
Learning support	10	5
IT Institution's planning	10	11

Looking across the Atlantic to the recently published results of the EDUCAUSE Current Issues Survey we see some similarities and some differences.

Rank	EDUCAUSE Current Issue
1	Funding IT
2	Security and Identity management
3	Administrative / ERP / Information Systems
4	Strategic Planning for IT
5	Infrastructure Management for IT
6	Faculty Development, Support and Training
7	E-learning / Distributed Teaching & Learning
8	Governance, Organization, Leadership for IT
9	Enterprise-level Portals
10	Web Systems and Services

By UCISA ranking

	EUNIS	UCISA
Anytime, anywhere computing	5	1
Systems resilience and availability	10	2
Network Security	2	3
Strategic Approach to Infrastructure	4	4
Learning Support	10	5
Network Technologies	8	6
Enterprise Portals	6	7

In the EDUCAUSE survey some of the Issues are rather broader in scope than in our survey and so we need map between them to try to provide a common view.

The table following brings together the top ranked issues of all three surveys.

	EUNIS	UCISA	EDUCAUSE
User Management	1	8	2 Security & Identity Management
Network Security	2	3	Possibly included in #2
Data interfaces	3		3 Possibly part of Admin / ERP/ Info Systems
Strategic Approach to Infrastructure	4	4	5 Infrastructure Management for IT
Anytime, anywhere computing	5	1	Possibly part of Infrastructure Management for IT
Enterprise Portals	6	7	9 Enterprise-level Portals 10 Web Systems and Services
Data Management	7	10	3 Possibly part of Admin / ERP/ Info Systems
Network technologies	8	6	
Information Security	9		Possibly part of Governance, Organization, Leadership for IT
Systems resilience and availability	10	2	Possibly part of Infrastructure Management for IT
Learning support	10	5	7 E-learning / Distributed Teaching & Learning
IT Institution's planning	10	11	4 Strategic Planning for IT
Ensuring sufficient funding		9	1 Funding for IT

It is interesting to note that Network Technologies feature in the top ten of two European Surveys but not in the EDUCAUSE

Survey. Securing funding does not seem to be a concern of the EUNIS members but is a concern of EDUCASE and UCISA members. Data Interfaces is recognised as an issue within EUNIS, but not within UCISA: it is an issue included within the rather broad EDUCAUSE Administrative / ERP Information Systems issue.

User Management, Network Security, IT Infrastructure, Portals and Web Services, IT in the Institution's Planning and E-learning Support are highlighted as important issues in all three surveys.

I suspect the issues around IT Governance and Information Security will become more prominent within the institutions of all survey respondents in the next twelve months.

How can one use the results of this type of survey?

You might find the survey results show you have already successfully managed one or more of the top concerns: that can encourage you and your colleagues.

You can find some solace if others appear to be finding the same matters to be of concern as you. The UCISA, EUNIS and EDUCAUSE organisations will no doubt provide resources and events to help their members deal with the issues identified as of most concern.

It may be that the top concerns (or indeed other candidate concerns) are not areas you are currently considering. You might consider using the top concerns list as a simple check to ensure that you have not inadvertently overlooked some areas where attention is required or is becoming important.

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