IAPetus

Quarterly Bulletin For the Institution of Analysts & Programmers

Issue 31 *September 1999*

IAP Symposium

You really cannot afford to miss this year's conference, which will be held in the splendid surroundings of Trinity House, in the heart of the City of London on Saturday 18th September.

Trinity House 18 September 1999

Steve Cumber has attracted a particularly distinguished list of industry luminaries as speakers, who will be addressing a wide range of computer topics, past, present and future.

Naturally, no IAP function would be complete without plenty to eat and drink, and we have organised a splendid buffet lunch and cream tea.

The total cost for the day is only £70 plus VAT for members and their guests.

This is the most interesting programme that we have put together for an IAP conference in years, and we hope that IAP members and their guests will take advantage, on a Saturday, of learning from a highly knowledgeable range of speakers, at a very modest cost. Please support *your* Institution.

To reserve your place, please call Nicole at the office *now* on 0181 567 2118, or send her an e-mail at dg@iap.co.uk

'Equal Opportunities' and the Internet

In many ways the Internet is a perfect place to offer 'equal opportunities' in all the many aspects which come under this phrase.

One particular strength of this technology is that it can present users with diverse backgrounds and capabilities with a 'level playing field' in which they can function and develop at their own pace.

The concept of 'equal opportunities' is very wide, the key point being 'inclusiveness' – the aim of ensuring that all individuals have, well, equal opportunities to do whatever they wish to attempt, to learn as much as they are able and to be free from any kind of discrimination or bar to access to facilities.

Naturally, the main focus of what is conventionally regarded as 'equal opportunities' work is aimed at improving conditions for those who are – or feel that they are – disadvantaged in some way.

The Internet and the Disabled User

Computer technology in general can be of great use to individuals with disabilities. Much work has already been done to enable people to operate computers in non-standard ways suited to their capabilities – touch screens, innovative pointing devices, tongue switches and so on. Already, people with disabilities can program, use word processors and other business and for that matter leisure software – anything that the rest of us take for granted.

The Internet, however, presents even more advantages and opportunities.

Because of its very anonymity any person who can in some way operate a computer is able to access the Internet, and communicate with other users irrespective of disability. The use of 'assistive technology' to enable people who cannot, for example, see a screen or use a normal keyboard to use a computer allows them to get on to the Internet.

Once there unless they choose to say something about their disability there is no way for other users to be able to tell that they have any

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Editorial

Herewith for your delight another *IAPetus*. With the announcement of the AGM, this one just has to go out now, so apologies that most of it seems to be written by the Robertson family!

There's a simple way to remedy this – write me some articles. Seriously, it's time you started putting pen to paper, paw to keyboard – I'm sure you are all doing wonderful things out there so there must be something which you want to share with the rest of us.

Hopefully this will reach you just before the IAP 1999 'Event of the Year' – the conference to be held at Trinity House in London, thanks to the Herculean efforts of Steve Cumbers.

With a bevy of interesting speakers and plenty of food, this sounds like an event not to be missed. All UK-based members should have received a mailing about this. It sounds like it should be great fun.

Last week we in England – and those of you in northern France and southern Germany – had the rare opportunity of witnessing an eclipse. My daughter (2½) is still talking about 'sun hiding behind moon'.

I have been buried in jealous e-mails from friends in other parts of the world, and 'tis said that the Internet virtually ground to a halt with people trying to access webcams and eclipse-related sites.

It's delightful that even in this day and age, with all our technology, that a natural event should cause so much excitement.

Megan C. Robertson

'Equal Opportunities' and the Internet – *Continued from Page 1*

problems! This can be very refreshing for a disabled person; one common complaint is that the people they meet see the disability rather than the person. Over the Internet, they can concentrate on being a person, and their electronic acquaintances see nothing more.

The Internet is a repository of useful information and discussions about disability, ways of overcoming the problems associated with it, self-help groups and so on; and so can be a valuable resource in itself both for disabled users and those who need to assist or otherwise interact with them. All this, in addition to the wealth of information and matters of interest which all users, disabled or not, can enjoy.

Interface technology is at an advanced state, so that those of us who write web pages do not need to give much consideration to the abilities of users apart from ensuring that visually impaired users are not restricted. There are several tactics that can be used to ensure that the visually impaired are not excluded, for example: -

1. The use of high contrast between text and background.
2. Provision of text descriptions of all images used (so that those using 'speech browsers' will hear about them.
3. Ensuring that text-based links are always available, even if you want to use image-based ones (again for the benefit of those using 'speech browsers').
4. Avoiding extensive use of 'frames' which confuse 'speech browsers'.

Interestingly, these are regarded in web-page writing circles as good practice anyway – so a well-written web page ought to be as accessible to the visually impaired user as to anyone else.

The way in which web pages are constructed means that any user who can control a 'pointing device' (e.g., a mouse or a light pen) will be able to navigate their way around the Internet with little difficulty, which means that even those with severe physical impairment are not denied access. Even if their control is less than perfect they cannot 'break' anything whatever they do!

In more general terms, the Internet can also be used to raise awareness and inform others about the nature of disability. If someone you know is disabled, you can research the particular problems, and so know how best to be of assistance as and when it becomes needful. Or just be equipped to understand something of what they have to cope with. I have even seen programs that simulate the 'letter jumbling' effect suffered by severely dyslexic people – quite an eye-opener!

The Internet and Different 'Ethnic Groups'

In its widest sense, 'equal opportunities' goes well beyond disability. People of diverse 'ethic groups' – particularly those living or working in a country other than that of their origin – often feel isolated from their 'roots' and may feel disadvantaged.

Just as those who, for example, use a wheelchair, are able to leave it behind when using the Internet, so someone who finds that their appearance, skin colour, etc., sets them apart may 'lose' it in the anonymity of Internet communication if they so wish. Others prefer to use the Internet as a means of keeping in touch with others of the same 'ethnic group' as themselves.

The Internet, by its very nature, can be a great breaker of national boundaries. Access to material in and about any nation you care to name is easy to find, it is no harder to read a page in some far-flung land as it is to read one hosted on a web-server down the road. Many national newspapers have a web presence, so you can read the daily news in the country of your choice, for example.

People who are interested in their own – or other – 'ethnic groups' can usually find material of interest. Although the main language of the Internet is English, it is just as easy to write web pages in any language (fonts are available for virtually every alphabet you care to name!). Material by, and about, nearly every nation or 'ethnic group' can be found if you are prepared to look.

However, it is important that users apply their full critical faculties to everything that they find. Information is often biased – towards or against the 'ethnic group' in question – and care needs to be taken especially when you are looking at material on a topic you are unfamiliar with. It is just as easy for those who wish to peddle racially biased views to gain web-space as it is for anyone else. All users – in particular those who are easily offended or upset – need to be ready to back out of any part of the Internet if they do not like what they find there. Comfort can also be taken from the fact that it is just as easy for them to built a website to air their views!

However, if you wish to maintain contact with your own cultural heritage, or find out about other cultures, the Internet is a wonderful resource.

The Director General writes

IAP99

If this edition of *IAPetus* has hit your doormat by mid-September, then you may still have a last chance to book a place at the IAP99 Symposium – our crowning event this millennium! What can I say that has not been said already? A super venue; a super programme; top speakers... I would like to take all the credit for this but the truth is that most of the work has been done by Steve Cumbers, and a lot of other people have helped..Please come.

IR35

When this issue first emerged it was individual contractors, their agents and accountants, and representative bodies such as the IAP that led the protests. The Revenue and the authorities generally were not too worried. There was a comfortable perception that contractors had been making too much money for too long. Now the gravy train had hit the buffers, and of course they were whinging. Employers, we were told, would be delighted to see everyone herded into righteous regular employment, and paying their taxes like good little Euro-citizens.

But then there was the sound of a giant stirring. The big employers had woken up to the reality of what IR35 was going to cost them. Banking, construction, petrochemicals, the water, electricity and offshore industries, many government departments and public bodies – all these sectors are heavily dependent on contractors. Not just IT contractors, but in a wide range of scarce disciplines. Finance directors all over Britain were doing their sums and coming up with the same horrifying answers.

There is no doubt the government realises now that it has made a mistake. The point has been made to them very forcefully indeed. There will have to be some face saving, but I am optimistic that IR35 in its final form will be a lot less damaging than we feared.

Personalities

Nigel Collins has reluctantly had to stand down from the Council. We are sorry to see him go, but understand why. Nigel splits his extended working week between home in Gloucestershire, his office in London, and numerous clients worldwide (in the geological mapping business). He needs more time to relax with his family.

More than anyone, Nigel was instrumental in taking the approach to education and training formulated by Harold Ead, and creating a compatible system for evaluating courses, working experience, and IAP membership applications. This has made it possible for our Education Officer Robin Jones to start opening up the IAP's relationships with the universities and private sector colleges. Nigel will be continuing as a member of the Education Committee. Runner-up in this year's election, John Weller, is taking over Nigel's seat on the Council.

Council Member Ian Hargrave has stood down as IAP Treasurer, having, he assures me, got our accounts into respectable shape. They certainly seem a lot easier to understand. I reckon I should understand the IAP's finances better than anyone, but often when I read the audited accounts I am filled with disquiet! Graham Fenton, another accountant, is taking over from Ian, and promises to continue in the same spirit.

We prefer to believe it was Ian's forthcoming marriage that prompted him to shed his Treasurer's job: he will obviously be needing more time for DIY. There is no truth in the rumour that he gave it up because he didn't like the idea of his brother and fellow Council member Tom checking up on every move he made.

Mike Ryan

Conclusion

I have touched on two of the main groups of people for whom the Internet can be a great advantage in the quest for a level playing field and equality of opportunity.

There are of course still barriers, the greatest of which is the financial one. However, while not everybody can afford a computer and Internet connection, the necessary equipment is now to be found in locations such as public libraries and local colleges. Colleges also offer reasonably priced courses in IT, often including Internet use, for those who would like to learn.

The Internet will not right the wrongs of this world – but it's a good place to start trying to alleviate some of the problems caused by a lack of communication between different groupings of individuals.

Notice is hereby given that the Annual General Meeting of the Institution of Analysts and Programmers will be held at 5.30 p.m. on Saturday 30th October 1999 in the Shakespeare Room at the Anchor Inn, Bankside, London SE1.

AGM

It would be appreciated if those members planning to attend would inform the office. Only Members and Fellows of the Institution are entitled to vote at a General Meeting, but other members are welcome to attend and to speak.

Agenda

1. Minutes of the 1998 AGM
2. Matters Arising
3. President's overview of the year's activities
4. Approval of the Accounts of the Institution for the year ended 31st May 1999.
5. Any other business.

Unless other instructions are received in writing at the Institution's office prior to 16th October 1999 it will be assumed that, if you are not present, your proxy will rest with the Chairman of the Meeting.

Notice of any other business to be considered must be sent in writing to the Director General so as to be received no later than 16th October 1999.

The Internet and Censorship

The basic philosophy of the Internet is totally opposed to censorship – in general, any kind of censorship is regarded as a 'systems malfunction' to be repaired or otherwise got around. Anyone should be free to post what he wants onto the Internet, anybody should be free to access what he wishes of the material available.

However, 'freedom' includes both 'freedom to' and 'freedom from'. Nobody should be forced to view material that they find offensive – be it pornography, racial bias, bad language, political views that they do not share, or whatever. Fortunately, every browser software package comes with this useful device, the 'Back Button' – if you don't like what you find as you browse, you can backtrack your way out of that area to parts of the Internet which you find more congenial. Note that while some sneaky web authors disable this, you can still use the integral 'history' file of where you have been to retrace your steps to a place you would prefer to view.

That's fine for the individual user. However, any organisation has to consider its responsibilities to members of that organisation, and decide what, if anything, they should do about specifying what is 'acceptable' and what is not. While it is in general a good thing to encourage people to develop and use their own powers of discrimination, it is necessary to recognise that what some people regard as perfectly acceptable is offensive and upsetting to other people.

We need to ask ourselves, in formulating a policy for Internet use within any organisation, how far we need to go in protecting people from exposure to material that they do not wish to see. In doing this, we have two main weapons.

The first is an 'Acceptable Usage Policy', a code which we can ask all members of the organisation to adhere to while using that organisation's Internet facilities. Nearly every Internet Provider and major user – both business and educational – has such a policy, and these are freely available for anyone wishing to establish their own.

The main focus of such a policy is to ensure that the provider of Internet facilities does not become liable to prosecution due to the actions of users of that facility! As such, the policy usually follows the law of the country in which the facility is physically situated as regards such topics as what is permissible in terms of, for example, pornography or political opinion. It has to be borne in mind that the Internet is truly international, and that – apart from people who wish to act in defiance of local law – what is acceptable in one country may be prohibited or regulated in another.

Things normally regarded as generally unacceptable include software piracy, the distribution of computer virus and 'hacking' information, material falling under the terms of 'incitement to hatred' – usually racist in nature, but it may apply to anything, there is homophobic material too, for example – and that difficult to define concept, 'hard core pornography'.

However, that can still allow in material we still might not wish to see on machines within a given organisation. Pictures and articles which, for example, may be sold in a newsagent (even if only off the top shelf!) can easily cause offence to many people. While it is easy to say 'OK it's out there but you do not need to access it', there are those people who find it intimidating or offensive when – for example – they catch sight of a 'topless calendar' which someone who enjoys the view has hung in their own private workspace. Others prefer not to see explicit scenes of violence in, for example, material reporting on war or on crime. Such people, who deserve as much protection and consideration as anyone else, are liable to be equally upset if the person seated at the computer next to them is accessing material which they find personally offensive.

It is very difficult to define just what is acceptable and what is not. Some people choose to rely on general 'rules of thumb' such as "Would you be happy for your mother to catch you looking at that? If not, don't"... but some mothers are more broad-minded than others! Some institutions – business and educational alike – restrict Internet use to work-related material only... However someone whose work includes the need to know about politics or sociology might well wish to look at potentially offensive political or racial opinions, an artist may require access to images others might deem pornography. A person working in tourism needs to be aware of the potential for booking holidays and accessing resort information over the Internet, but someone planning their next holiday could be deemed to be in contravention of such a policy. It also depends on whether the organisation wishes to view its Internet provision as being purely for study and work or as a recreational and general facility as well. There probably is not a single member of any organisation with Internet access who has not looked for material of personal interest as well as for information relevant to what they are supposed to be doing!

The key, I feel, is to engender responsibility and respect for others in all users, to encourage them to consider other people in all their actions and to avoid giving needless offence.

The other tool at our disposal is the so-called 'nanny' software filters. All of these are inefficient to a greater or lesser extent; both permitting access to material that their users intend to be excluded and preventing access to perfectly acceptable material. For example – there is a considerable body of material on contemporary and recent history on a webspace provider called 'Geocities' that is totally blocked by most organisations' 'nanny' software... 'Geocities' is notorious for hard-core porn as well!

Both webpage providers and users are getting more and more aware of the limitations of 'nanny' software, and can usually find a way around it if they really want to either display or access material intended to be excluded. Sensibly used, it is possible to deter the casual browser from accessing unacceptable material but at the risk of excluding useful and acceptable material.

It also needs to be borne in mind that most 'nanny' software is primarily aimed at blocking pornographic material, and it is normally far less capable of filtering out other equally offensive or unacceptable material – for example, images of violence, intolerant political opinions or recipes for terrorist devices.

Even once an acceptable use policy has been agreed and imposed, and 'nanny' software installed if required, there are still ethical considerations in the policing of users. Most people do not realise

We are particularly pleased to welcome a new member who was recently admitted to the Institution with the grade of Fellow:

Chess Ferrier
A contract programmer for more than 15 years, Chess Ferrier is a specialist in Oracle, having used it over a stunningly wide range of applications. He has held key leadership roles in major projects for National Power, IBM, ICL, Intel, BP, Esso, as well as a number of public authorities and finance sector organisations. He is currently overseeing the migration of all its old DOS based systems to Oracle for International Telephone Services of Southampton.

We congratulate the following members who have recently been upgraded to Fellow:

Martin Bajada
Martin is one of our members in Malta. He joined the Institution as an Associate Member in 1990, and was upgraded to Member in 1993. He was one of the first consultants in Malta to provide computer advice to businesses, independently of the commercial hardware and software package suppliers. After a slow start the approach paid off and by 1995 a good client base had been established. It was a search for further expansion opportunities that led Martin by chance into the field of computer forensics where he has since specialised. Malta is a centre for offshore banking, and the financial sector provides a rich field for forensic work. But assignments have also involved software piracy and murder.

Gilbert Edlin
Unusually for members of the IAP, Gilbert Edlin's background is in hardware, though in recent years he has built up his interests in the software side. When he joined us as a Member in 1994 he was in his fifth year at the BBC, responsible for the planning, installation and day to day maintenance of their wide area network of PCs. Shortly after this he moved to Datapro Information Services, later taken over by the Gartner Group, where he has been involved with major projects in the UK, the States, in Singapore and in the creation of truly global systems.

Hasnain Hussain BCom PgDip MBA
Since 1991 Hasnain Hussain has been Senior Systems Analyst with the Abu Dhabi Investment Company. He was the project leader responsible for upgrading the bank's old 3GL environment to a 4GL relational database system on Oracle RDBMS. He has since implemented a number of other innovative system developments at the bank, and is responsible for preparing their annual IT budget and advising generally on their IT needs.

We are also pleased to report the return after seven years of Neil Imrie, who originally joined the Institution as a Fellow in 1985, but lost touch in 1992. Welcome back, Neil.

that, for example, their e-mail is not secure – they usually view an e-mail as an 'electronic letter' and while it is an offence to tamper with someone's post it is not illegal to read someone else's e-mail. If an institution wishes to control – and so of necessity, run some kind of check on – its members' Internet access, it needs to make all users aware of the nature of the checks that they may be subject to, and the penalties which will be levied on any infringements of the institution's code of practice.

The law of the land also needs to be taken into account. A recent case where a member of an insurance company was sued for defamation led to his company being served a court order requiring them to retain all e-mails sent through the company system for inspection.

Any kind of monitoring or policing also leads to the risk of being named as a co-defendant in an action brought against an individual member of an institution. The rationale for this is that by exerting any form of control or oversight the institution accepts 'editorial responsibility' for material passing through its system. A common practice, and one easy to implement, is to 'tag' all e-mail with a notice drawing the recipient's attention to the fact that the contents of the e-mail are the sole responsibility of the author and do not necessarily reflect the position or opinions of the institution from which it was sent.

Working in Further Education, I was recently given the job of drafting an Acceptable Use Policy for the College. To be honest, I am not sure that I am the right person for the job, I am a firm believer in individual responsibility. Still, this may be a good starting point in setting out guidelines for what members of the College should and should not do while they are online.

I decided that if the policy did not fit onto one side of A4, most people would not bother to read it even if they were required to sign consent as a condition of being given access to the computer facilities. So I tried to condense all the factors to be considered into a series of general statements which would act as guidance to members of the College as they decided what was and was not permissible. I also felt that it would be useful to state why such a document had been prepared at all:

> A written policy is necessary to ensure that all users of College computer facilities are aware of their rights and responsibilities; and to provide a yardstick against which the behaviour of College members can be measured.

The points I decided were the most vital were:-

1. Each user must protect their personal password, and respect the privacy of other users' passwords.
2. No user may falsely represent himself to the College system, or via it to any other system.
3. All users must observe all laws relating to copyright, trademark and intellectual property rights.
4. Users must ensure that their electronic communications do not infringe the rights of others and are in accordance with the same standards of behaviour that apply throughout the College. This means that they may not post or access any material that is unlawful, harassing, libellous, invasive of another's privacy, abusive, threatening, harmful, vulgar, obscene or otherwise objectionable.
5. Users may not engage in activities which compromise the College system or which affect network performance for others. This includes excessive use of resources, and the introduction of any virus or other software liable to cause damage to data or programs.
6. Users must appreciate that in using College facilities to send e-mail, they speak solely on their own behalf, and may not commit the College to any obligation unless specifically authorised to do so.

At present, this is still under discussion and subject to amendment. But it is at least a start!

Megan C. Robertson
Webmeister,
South Cheshire College

The IAP Accounts for the year ended 31st May 1999

	1999		1998	
INCOME				
Application Fees and Subscriptions	162,995		142,161	
Other Income	16,684		8,137	
Total Income		179,679		150,298
EXPENSES				
Services to Members and Promotional Activities	76,642		78,746	
Salaries and Staff Costs	60,871		47,493	
Office Overheads and Professional Expenses	27,788		23,483	
Total Expenses		165,301		149,722
SURPLUS OF INCOME OVER EXPENDITURE		14,378		576

Accountants' Report to the Members of the IAP

In our opinion the Financial Statements give a true and fair view of the state of the Company's affairs at the 31st May 1999 and of its surplus for the year then ended and have been properly prepared in accordance with the provisions of the Companies Act 1985, applicable to small companies.

Charles Stuart
Chartered Accountants and Registered Auditors

Full accounts are available from the Institution.

FREE LEGAL ADVICE

Up to half an hour's free telephone advice per problem on legal aspects of IAP members' work in Information Technology, from solicitors in a top international law firm.

Does not include writing letters, or considering documents sent through the post.

Special rates quoted for IAP members on any kind of legal work.

Call Mark Snelgrove on 0115 950 0055, at Browne Jacobson.

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Working as a Webmeister at a Further Education College, I have an unrivalled view of how Internet technology is becoming part and parcel of education, how it has the potential to contribute greatly to the teaching and learning process or to fritter away resources best concentrated elsewhere.

Educational Aspects of the Internet

The Internet is a wonderful place full of opportunities, but like any resource, any tool, it needs to be approached with caution. This is especially true when it is being considered in terms of its educational uses, for educators have certain responsibilities to their students, in addition to the normal responsibilities that every human being has to all others.

The structure of the Internet encourages the free flow of information. This is both a strength and a weakness. It is a strength in that it allows an unprecedented freedom of access to users, a garden of delights for the mind to play in.

It is a weakness because that information is by and large unregulated. Both of these aspects present certain problems which I need to be aware of as I build the College's website and Intranet; and as members of the College are directed into greater use of the Internet as a teaching and learning resource.

Teaching Styles and the Internet

Traditional educational tactics have been to direct the student's learning, presenting him with information and resources carefully selected by the teacher, who uses his experience and knowledge to ensure that the material made available is tailored to the learning objectives he wishes his students to achieve. As soon as students are directed to make use of the Internet, this control is lost.

When selecting more conventional material to present to students, a lecturer can ensure that it is valid, accurate and current. Text-

books and journal articles are subject to peer review, and of course the lecturer has his own knowledge of his area of expertise with which to assess material before deciding to use it.

Even when an Internet-aware lecturer has spent time prior to class searching for relevant material, which he can then direct his students to use for independent study, he has no control over that material. The author of the web page may decide to make a change. Moreover, once the student is on-line, he is likely to follow links and make use of search methodologies to find further information on the topic in question.

By the very nature of the Internet, anyone can post whatever he likes. This is a strength and a weakness – for this very freedom ensures that rubbish as well as worthy material is equally available. With experience and knowledge it is usually possible to discard the most outrageous offerings... but some are so well presented that it is difficult unless you are a real expert to spot the flaws.

Of course, this is a great opportunity for the students to develop the ability to locate, to evaluate and to make use of information from diverse sources and of varying quality, surely one of the primary objectives of education.

They need to be taught to approach the material that they encounter with a reasonable degree of critical thought and scepticism rather than the more common classroom image of assimilating the facts with which they are presented.

The Changing Role of the Teacher

Many teachers have mixed views about the growing use of the Internet in education. These range from fears that they might be superseded, concerns that their students may be led astray and a lack of confidence in their own IT skills, to a delighted embrace of the facilities on offer. All are valid opinions and need sensitive handling by the IT and Internet professionals working with them.

I do not believe that there will ever be a time when teachers are no longer required. There may well, however, be a major change in their role. Intelligently used – by both teacher and learner – the provision of educational material via Internet and intranet can free up the teacher from the burden of 'information provision' and allow him to concentrate on teaching his students how to interpret and use information pertaining to the subject being taught, rather than having to spend all his contact time actually imparting the facts in the first place.

This requires organisation on the part of both teacher and student, and some degree of trust, to work successfully. The teacher must ensure that the information the students require is available – in the shape of intranet pages or pre-examined Internet links – well in advance of the class, and the students have to assimilate the information before the class meets, ready for the teacher to use that information during the course of the lesson. Fine for older and well-motivated students, but to begin with this technique should be used sparingly until all parties are used to it.

The teacher needs to put aside some time to deal with the inevitable enquiries, there will always be students who encounter difficulties with the subject matter which need to be resolved before the lesson so as not to occupy time better spent on whole-class teaching. It is also essential that students are conversant with basic IT and Internet use and have access to suitable machines.

Students need to change their perceptions too. They have to be ready to take more responsibility for their own learning, a useful preparation for both further study and for the world of work. The nature of the Internet also means that they have to develop the ability to remain focused and on target – it is all too easy to wander from the topic of enquiry.

The acquisition of IT skills is fundamental – but it seems to me that it will not be long before an individual who cannot perform at least basic functions on a computer will be at a serious disadvantage, much as one unable to drive a car is today. The need to become computerate will be on a par with being literate and numerate. This is already being recognised within education, with the establishment of a series of 'Key Skills' which all students are required to master irrespective of subject. These include communication, the application of number and IT.

Teachers at all levels are also being encouraged to venture into the world of IT. Naturally, some find that their other responsibilities do not leave them sufficient time, find it is an area in which they have little talent or are just plain not interested.

From my standpoint as webmeister, it is important to make sure that all teachers receive the level of support they need. Some already know how to write at least basic webpages, which can be incorporated into the College intranet swiftly. Some want to learn, so time and resources have to be provided to facilitate this.

Others can at least provide material in the shape of word-processed documents... and even those who prefer to provide written material should be made welcome and encouraged to collaborate in its conversion into electronic format, even if merely by being consulted as to colour schemes and layouts.

And I thought this job was all about writing webpages! I seem to spend quite a lot of time in meetings and even find myself having to hold forth on the matter to lecturers and others.

The important thing is that I enjoy it, and can try to pass my enthusiasm for gathering and using information on to every member of the College, lecturer and teacher alike.

Megan C. Robertson
Webmeister,
South Cheshire College,
Crewe, Cheshire, UK.

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