

Adelaide University Postgraduate Students' Association

Submission on

The Proposal to Charge Students for the Use Of the Internet

Presented by **Rikki Wilde**
 PGSA President

Prepared by **Robert Houghton and Rebecca Johnke**
 PGSA Research Officers

July 10, 2001

Introduction

The Postgraduate Students' Association (PGSA) represents the 3,500 postgraduate and honours students enrolled at the University of Adelaide. This includes approximately 1500 postgraduate research students, 1500 postgraduate coursework students, and 500 honours students. In responding to the document "Student Internet Charging Overview"¹ we have sought the views and opinions of postgraduate students via a question sent out on the postgraduate email list. The PGSA has received an unprecedented response to this question, which indicates the depth of feeling on this issue. In total we received 93 responses. A summary of responses can be found in Appendix A, and the email question in Appendix B.

The document "Student Internet Charging Overview" proposes that undergraduate students be charged for the use of the internet from semester two this year. It is proposed that students be given a flagfall quota of 25 megabyte (MB) per semester and that a charge of 25-30 cents per download will apply for usage above this quota. We understand that departments and cost centres will be charged for postgraduate usage. It is therefore likely that departments will pass these charges onto postgraduate students. We are also told that students can apply for a manual adjustment of their quota, however keeping track of such adjustments will only add further work to already over-worked administrative and academic staff.

The PGSA strongly opposes the introduction of charges for the use of the internet. The internet is a crucial communication, learning and research tool for most postgraduate and honours students. The PGSA will show within the body of this submission that many postgraduate and honours students are heavily reliant on the internet for their study and research. Publishers and libraries are increasingly turning to forms of electronic publishing, archiving and retrieval and a vast amount of valuable information has been converted into electronic format. Increasingly it is the only means of obtaining this information. The feedback we have received from postgraduate and honours students indicates that many use the Internet on a weekly and even a daily basis to conduct their research and study. To restrict access to the Internet can only be seen as a false economy. It will restrict and diminish the very core functions of this institution: research and learning and isolate the University from advances in knowledge and research innovation. Surely this is counter to the University's aspirations of becoming a world-renowned institution of higher learning and research.

In general, postgraduates are sympathetic to the University's argument about the need to reduce and prevent recreational use of the internet, which is the ostensible reason for introducing the quota. However, they are of the view that measures to restrict recreational use should address this specific problem and not restrict, diminish or impair the use of this research tool for the majority of postgraduate students conducting legitimate study and research. Many students who responded to our request for feedback indicated that they were far too busy to be involved in recreational use of the internet. Feedback from a number of honours and postgraduate students also indicates that a careful approach is needed in defining "recreational use". Students undertaking advanced study and research need to draw a wide net in gathering information. Students should not be discouraged from pursuing potential sources of information due to concerns about quota limits and the costs incurred. Moreover, some students are undertaking research in areas such as architecture, film, art history and music that may require them to download images and sound. There needs to be mechanisms to ensure that students in these fields are not prevented from using the internet for their legitimate study and research.

We would also like to stress that students already pay significant fees towards the cost of their higher education study. Charging for the internet will only add to this financial burden. For all of the above reasons the PGSA strongly recommends that honours and postgraduate students be exempt from the proposed internet charges. Failing this, we recommend that the University adopt a fair, transparent and equitable system of charges for the internet.

¹ S. Snyder, Student Internet Charging Overview, May 2001.

In our view a fair, transparent and equitable system needs to take into account the real requirements of postgraduate and honours student use of the internet, and would incorporate the following points:

1. **Honours and Postgraduate students must be allocated a realistic flagfall quota.** Feedback from honours and postgraduate students indicates that the 25MB flagfall quota proposed for undergraduates would be woefully inadequate for their study and research requirements. This feedback suggests that a quota of 500 MB/year to 1.5Gigabyte/year would be more appropriate.
2. **Charges for downloads over quota must reflect market rates.** The proposed charge of 25-30 cents per MB download above the flagfall quota is approximately double the market rate and should be reduced accordingly.
3. **The charging system must be consistent across the University.** There are considerable differences in the financial situation of many departments and costs centres. As a result some departments may be able to grant their postgraduate students larger flagfall quotas and lesser charges than those adopted by other departments. This will result in many inequities, anomalies and discrepancies between departments. There is also the question of how this system will incorporate students enrolled in more than one department or cost centre. The PGSA suggests that a university wide base line quota be allocated for postgraduate and honours students, and that departments be able to increase this quota according to established need.
4. **Student email should be exempt.** Email is an essential and rapid communication mechanism. Most students communicate with supervisors and lecturers through this medium. It is also a crucial means of maintaining links with international researchers. In addition, Departments, Faculties and the University Central Administration all use student email lists as a means to send out important information to students. It is vital that students not be prevented from using this communication tool and from accessing important University notices.
5. **Downloads from internal University websites (the intranet) should be exempt.** The University's web pages contain vital information on academic programs, courses, academic policies and services. More course materials, assignment questions and other resources are being placed on line. This trend will certainly increase. In addition, students can now view and amend their enrolment on-line through SOLAR and we believe that this trend to automated administrative processes will grow in the future.
6. **Access to electronic databases, electronic journals and other electronic resources through the library should be free.** The University contains a wealth of information including exam papers, databases and text documents in electronic format. Many students search for material using on-line search facilities. Moreover, the University library has ceased receiving a significant number of journals in hardcopy format – increasingly using electronic journals instead, and has embarked on a program to convert a greater number of journals to electronic format. It would be a gross injustice to prevent students from using their own library resources. We wish to stress that it is not sufficient to provide free access to the Library's databases and electronic search facilities. The library purchases (from external sources such as publishing companies) its electronic journals and links to electronic information. Access to electronic-journals and texts linked to the Library through external websites must be exempt, or the size of the flagfall quota increased significantly to enable honours and postgraduate students access to these electronic resources (see point 1).
7. **Access to clearly identified educational sources and data-bases should be free.** We understand that students will not be charged for access to Flinders University and University of South Australia resources via the internet.² This should be extended to all University sites in Australia and worldwide, and to government sites and recognised research data bases.

² Correspondence from Ian Creagh, Executive Director, Division of Student and Staff Services, to the President of the Overseas Students' Association, dated 18 June 2001.

The Internet has become an essential study and research tool.

The internet has become an integral part of the learning and research environment of Universities. Postgraduate and honours students report a plethora of communication, information and research roles played by the internet that are essential to their legitimate research and study activities. As publishers, libraries, and archives convert more and more information into electronic formats, the internet has become a vital source of vast amounts of information and research. It is often the internet that enables students to access the most recent and cutting-edge advances in their fields.

To illustrate the importance of the internet consider the following statements forwarded to us by honours and postgraduate students:

From my perspective as a PhD student studying Microbiology, I frequently download publications in the form of pdf files to keep abreast of a rapidly moving field. The main reasons for using online journal articles is that it saves a great deal of time and money (when compared to photocopying articles in the library), the library often does not hold the required journals, and new articles may take weeks to appear in the library.

Mathematical and Theoretical Physics are areas of research in which people publishing papers will publish their work either solely on the net, or in conjunction with a hard copy journal, however their research may take up to a year to appear in the Barr Smith Library Journals. As a result of this almost all research material in these fields is downloaded from the net.

Increasingly, the world of Genetics and Molecular Biology (anyone heard of the Human Genome Project??) is going online. Online search tools, sequence analysis, pubmed literature searches, online scientific discussion groups, online-only scientific Journals, online gene/protein search facilities.

What about when internet use is the actual research? ie submitting DNA sequences to external databases for analysis. [Being charged for using the internet] is akin to paying for your own chemicals to do your research. (PhD Student Molecular Biosciences)

Those of us [in computer science] working with implementations and clusters of computers occasionally download images of operating systems to install. An install might consist of 2 to 4 ISO CDROM images (650MB each) or a direct ftp transfer of an equivalent volume of data. In my first days as a postgrad, I built my own copies of gcc, gnome, gimp, gtk, latex, X and a few other things for my desktop machine. There would have been maybe 500MB of downloaded source to build all that. I install a new linux kernel once every 3 months; each is a little over 20MB.

Law students need to use AUSTLII and WESTLAW research sites on a regular basis for genuine research purposes (we certainly don't use them for fun!). AUSTLII provides us with the most up-to-date cases and consolidated legislation available, and is an essential research tool. WESTLAW is a new legal research tool ... and is *incredibly* helpful for essay research, etc. Particularly useful for Honours students like myself...Unless student email, AUSTLII, WESTLAW and ALICE were all free of this download quota - I think the University would have a lot of very angry Law students on their hands.

I use the internet quite a lot for my study. I am creating a computer based model ... and need to use up to date software. Some of the software (well almost all of it including OS) comes of the internet. Most of it I can get from the Australian University mirror site but the major one I have to download from the States. If I am to remain up to date, which is not a matter of pleasure, I have to download a new version of at least one of the program's per semester. As they are from 50 MB up in size I would start paying before my first download is complete [based on a 25MB flagfall quota]. (PhD student Faculty of Agriculture and Natural Resources Science)

The field of electronics is moving at such a rapid rate that the conventional "library" can no longer keep a researcher up to date. As a result, I rely on web browser to obtain information and news. (ie. conferences have web pages, useful information from home pages of other Postgraduates/Academics/Researchers around the world).

This is only a small sample of the responses we received. What it demonstrates is that the internet has become an essential research and study tool. It provides access to electronic journals and text, allows students to search of archives and libraries, to participate in electronic discussion groups, access and analyse data, access to up-to-date software, and allows students to obtain information about recent developments in their fields. Moves to curtail the use of the internet clearly put these activities at risk, and can only diminish the quality of research and advanced scholarship produced at this University.

A key concern of many respondents was their ability to access electronic journals. The Library has been reducing its journal subscriptions for a number of years. Many respondents to our email question reported that they are heavily reliant on electronic journals. It should be noted that the Library, as part of its strategic planning, has proposed a *Journals in Transition* program to:

facilitate a systematic and targeted program of concurrent print and electronic access to several hundred electronic research journals in science, technology and medicine, plus a number of core humanities and social science titles, rapidly increasing as more titles become available electronically.³

Overtime, it is inevitable that electronic journals will become the most prominent, medium for journal publication and retrieval. With this in mind, it is no wonder that many postgraduate and honours students fear that charging for use of the internet will restrict their access to this vital source of information and research. These concerns are well illustrated in the following quotes:

The university has been under funding the Barr Smith Library for years, and so access to recent journals often requires Internet access. Many of these are downloaded as Adobe Acrobat PDF files, not standard web pages. These documents often exceed 2 or 3mb each, and so would therefore blow any 25mb usage restriction very quickly. I was under the impression that we were meant to use the Net instead of relying on the BSL ... Is the university going to allow us to claim that we had inadequate resources, should we fail to access current research, just because we have restricted Net access? What sort of quality does the university expect its students' PhDs to be, if Net access is restricted? - Is the university going to similarly go to lower PhD requirements? If the university wishes to be one of the world's great institutions by that mythical date of 2022, then this is certainly one way to stop that happening... Adelaide University students WILL be denied access to cutting edge research and information, should this misguided, totally idiotic policy of limiting Internet access be applied. (PhD student Centre for European Studies)

As a chemistry research student, the charging of internet access seems a bit much. The library has been cutting back its subscriptions to chemistry journals on a yearly basis, thus in some cases the only way to keep up-to-date with the literature is via the internet (especially for the online journals).

Restriction on downloads from the internet can only damage the research potential of this university. I'm currently doing a PhD in medical informatics, and internet access is a vital aspect of this project. Many medical journals now offer online subscription, and the Barr-Smith library is taking advantage of this services. This both increases convenience and accessibility as we can not only download the full text articles, but also unpublished data associated with each study. These data can be quite substantial to download, yet essential for the studies to be correctly interpreted, and greatly beneficial for analysis. Last year, for my honours project, I reviewed over 400 articles. Given that a pdf of each article is, on average, about 200Kb, this equates to 80Mb of downloading, not including any other data. Some data downloaded for a project last year came out to be 375Mb in size. This was vital for the analysis and evaluation of the project. Being asked to pay for this would add extra financial strain, and most probably discourage the retrieval of these data and articles.

Our library is going increasingly online, and substituting hardcopy Journals for Online access. Last week alone, I downloaded about 7 journal articles. Typically these are PDF documents, and range from 500k-3megs EACH. Last week, my Documents alone were 25megs. Now the university wants me to pay for the other 25 weeks of the semester?? (I am a postgraduate student, so a semester is much longer for me). Lets do the sums now: So for 25weeks x 25 megs a week (For journal articles) = 625megs a semester. Then multiply that by \$0.30 = \$187.50!!!!

What must be recognised is that the library purchases electronic journals from external publishers. When a student clicks on a journal article, the information is being downloaded from an external source. This means that any proposal that exempted internal Adelaide University internet access would not protect those students using electronic journals. As a PhD student in Psychology explains:

In my experience downloading articles from some of the journals that are available through university links mean that I have to go outside the university network to access them and to get the PDF file. As a PhD student it would not take many of these to add up to my quota!

Recommendation

The University must ensure that use of library resources, including electronic journals and other material are exempt from internet charges.

³ R Choate, The University of Adelaide Library Strategic Initiatives Planning 2000, Draft Discussion Paper, May 2000, p.2.

The internet is an essential part of postgraduate and honours student studies for many other reasons, as the following feedback shows.

Access to Research tools

Most other research tools are now internet-based. Telephone directories, reference search engines, on-line texts, email and other resources are all essential for the success of the modern student, and particularly for the researcher.

Access to Study materials

Some subjects (for example English Honours) have mailing lists that are a compulsory component of the course. Perhaps subjects with an internet component could allocate an extra download allowance and students doing those subjects could have their quota added to?

[Computer Science] students don't have access to floppy drives or any other removable media to take their assignments home. So they FTP them to external ISPs and then download them; then do the reverse to get the finished code back to the uni. A given assignment with all data might occupy a good fraction of a MB and a student will do this once every month or so. Per subject.

Communicating with supervisors/lecturers/subjects

Email has become the essential form of communication for me, which includes the transfer of files between myself and my supervisor, outside agencies and other colleagues. I presume the download quota would extend to email accounts. I would be more than angry to have that affected by internet fees.

Access to the internet is crucial for my studies, most information for my thesis being on the web, and my contact for all my interviewees currently by email.

With the university using a web-based email system, it is virtually impossible not to spend time on the net. In addition, those students with supervisors not in the same physical location often email documents and receive them in large numbers, as they are sent for revision and returned.

I am completing honours off campus and the limited time I get in the Barr Smith Library must be used to the maximum productivity: Less time searching the shelves and more time reading and printing articles online. The online journals and full text articles available enable me to Email them to myself where I can read the text more thoroughly and print the necessary articles also saving me photocopying money (at times I have often spent \$30 at a time photocopying). The internet is vital in this regard and I am sure I have downloaded well over the proposed limit already, all for legitimate research purposes. Articles I use are generally large and have photographs and big images (500K).

Many students use Web based mail services such as Yahoo, for their every day e-mails. This means that they receive, often large, but otherwise frequent e-mails from other students and staff. From my experience up to 1.5 or 2 megabytes per day is not uncommon. Due to this reason, I feel that a 25 Megabyte flagfall quota is much too small.

Teaching

[Another] factor which needs careful consideration is the impact teaching has on a postgraduate's demand for the internet. Many postgraduates teach and it seems reasonable that from time to time, they will need to download articles etc. from the net.

The University's website is also an important source of information about University services, policies and personnel. Administrative processes are also being automated and placed on-line, which would also impact on student downloads.

Recommendation.

Given the importance of the internet as a communication, research and study tool, the PGSA strongly recommends that postgraduate and honours students be exempt from the system of charging for the internet.

On the question of recreational use

The primary reason given by IT Services for the adoption of a system of charges and quotas for internet use is that the University is subsidising significant recreational use of the internet. The only evidence used to support this argument is the claim that “numerous studies have found that internet usage in workplaces is recreational.”⁴ No references to these studies are provided so that the University community can verify the applicability of these studies to an educational environment.

Further, no data is provided on the amount of “recreational use” within the University, whether it is occurring broadly across the University community or whether there are concentrated areas of inappropriate use. It is not clear even if IT services are aware of the form of this recreational use – whether it is concentrated in “10 hot sites” or more diffuse. Such data would certainly have greatly informed the current debate about internet charging. As one student commented:

Now that the Uni has introduced a system for tracking which internet sites we have visited, couldn't this be used to perform a survey and determine exactly how much internet use is actually for recreational purposes? My bet is that legitimate use of the internet by post-graduate students would far outweigh any recreational use. I cannot speak on behalf of undergraduate students, who perhaps do contribute significantly to recreational use, but why should we be penalised for their poor judgement?

And another student:

I would encourage the university to make use of the research expertise within the university and provide some evidence to support any moves they might wish to make.

The PGSA believes that it is unfair to suggest that misuse of the internet is widespread. Quite a number of the respondents to our email question were offended by the suggestion that they might be engaged in recreational use of the internet:

Recreational net use eh? I wish I had the time!

I'm a Post Graduate student (Masters) with AME and would like to strongly object to the proposed charges for internet use, for a number of reasons. First of all, I'd like to point out to IT and others that I, and most other postgrad students, don't have TIME to use the internet for recreational purposes (if only we did!). 'Recreational use' should not be a valid reason for internet charges to be laid onto Postgrad students.

I would challenge the IT branch to demonstrate that most IT use is for "recreational" purposes. I use the internet for my research and future job and study possibilities.

Care also needs to be exercised in defining recreational use. One of the respondents to our question had completed an honours thesis that examined the use of the internet as a propaganda tool by extremist organisations. This student was concerned that the subject matter of his research would be misconstrued as “recreational”. Another student undertaking research on film expressed similar concerns:

Also I think it would be important to challenge the notion that just because IT seems to have some impression based on ‘who knows what’ that most internet access is recreational. It is difficult to tell, in my case for example because film is an area of research there are sites where I can view films, if this were viewed out of context it may look like I'm simply having fun

Recommendation

The PGSA recommends that IT Services provide more detailed information on the scale and sources of recreational use of the internet within the University, so that a more informed decision can be made on its proposed system of quotas and charges for student use.

⁴ S. Snyder, op. cit.

There were a number of respondents who acknowledged that recreational did occur. In general their view was that the University should address this issue and not introduce a system that would adversely affect the research and study activities of honours and postgraduate students.

If the problem is as stated as being to curb "recreational" use then why not address that problem? Surely there is a less draconian approach available. Or is this just a badly disguised attempt to grab some more money for IT.

Perhaps the university needs to actually confront people who are abusing the system and simply ask them politely to only use the computers for study purposes, instead of limiting the access of the entire student body.

There are certainly some "bad apples", especially at undergraduate level, who download far more than most other users, and the university may benefit from seeking them out and placing restrictions. However, placing these restrictions on everyone and making them this tight is draconian. A more appropriate policy would perhaps be to identify the abusers and, after warning, limit their access privileges.

Instead of making us pay for the internet why not ban sites that people are abusing and making the rest of us have to pay?

Recommendation

The PGSA recommends that other options be explored to address inappropriate use of the internet before a system of charges is introduced.

For example, the University could look into blocks on certain kinds of downloads. As discussed above, care would need to be exercised to ensure that legitimate research and scholarship was not restricted due to an overly narrow concept of 'recreational' use. This view was put by a number of respondents. See the quote below:

I can understand that the university is concerned by the excessive amount of Internet use and that some of this may not be for educational purposes, but I feel that other alternatives may be possible. For example, instead of placing a quota on all internet use, place blocks on some kinds of downloading (such as mp3, real audio and real video files or excessively large files that can be costly) which can only be accessed with special permission from ITS. This would reduce the amount of files that are downloaded for recreational use (such as napster and live feeds from websites such as 'Big Brother') but not interfere with Internet use for legitimate purposes. In the very least, a much larger downloading quota must be considered so that only people the use the Internet excessively will be charged. For example Telstra offers 300MB per month with 20 cents for each additional megabyte which would be much more suitable.

If the University is unwilling to consider an exemption for honours and postgraduate students, and unwilling to introduce alternatives (such as blocks), then it must ensure that the system of charges and quotas adopted is fair, transparent and takes into account the real needs of postgraduate and honours students. This is discussed below.

Towards a more equitable, fair and transparent system of charging

A realistic flagfall quota.

Many of the respondents commented on the 25 Megabyte free quota proposed for undergraduate students. The overwhelming response was that this quota was completely inadequate for the needs of postgraduate and honours students.

A number of students provided estimates of their legitimate internet usage. A sample of these are quoted below to provide a more realistic estimate of an appropriate flagfall quota for postgraduate and honours students.

On average I would download 3 papers per week as .pdf files from the various journal web pages that the university subscribes to. The size of the downloaded files varies, from ~1MB to ~5MB. Say at an average of 2.5 MB, over the 26 weeks of the first semester (given that postgrad students are present throughout the year, and not just during teaching semesters), this works out to an average of 195 MB per semester. (Environmental Biology PhD)

Internet usage has become a major topic of discussion among PG's in [Civil and Environmental Engineering]. Some time ago we were informed via our Departmental Computing Officer of the possibility of internet charges. In order to gain an understanding of the MB usage of each student, we asked the department to produce weekly reports on our usage. On average, the PG's in our Department use 9MB per week per student. This equates to 240 MB per half year [Around 500MB/year]... We believe the quota of 25MB is extremely low and in no way reflects how important the internet is to undertaking postgraduate research. Ideally we would like to see charges scrapped for postgraduate students, however understanding that this is unlikely, most students in our Department could manage a half-year quota of 175-200MB per student. An alternate solution would be to introduce a quota of 100MB and once a student reaches this quota, he/she needs to show that the majority of use (85-90 %) has been research related. Once the student has met this criterion, they are then extended to 175 or 200MB. This system may be presently used at another University.

I'm a research postgrad in the Electrical & Electronic Engineering department. I work in a field, which is rapidly changing, and the only way to stay on top of news in this and related areas is the internet. In terms of simple web browsing of industry-related news sites - which I do daily - I'd be easily clocking up at least a couple of megabytes per day. I also frequently download research papers, bibliographies, and the results of bibliographic searches which would make this number rather higher. In addition, I need to download various software packages on a regular basis to perform my work. Some of these packages are a few tens of megabytes, and occasionally exceed 100MB. Updates also need to be downloaded from time to time, and these would contribute at least 100MB/semester (for my legitimate use). This has probably been accelerated to some extent by the open-source movement, however it is still cheaper (and better) than paying Microsoft et al. Clearly the 25MB per semester limit is untenable - I would legitimately use this much within a couple of weeks for web browsing alone.

It is instructive to consider 4MB/hr usage as a standard. For undergraduate students, 25MB therefore is a disgrace. Their usage should be more like 250MB/semester. Honours students (and any fourth year engineering student) should be included in postgraduate ... A postgrad student should have 1.5G/year or none at all ... they should be considered the same as staff and get the same privileges as they're the ones that use it the most. ... For a postgrad, the newer medium of electronic publishing of papers in pdf would murder a quota easily, especially when you consider 500k as an average per paper! Include also searching in yahoo/altavista etc and you get the picture! (Physics PhD Student)

Recommendation

The PGSA recommends that a flagfall quota of between 500MB/year and 1.5G/year be adopted as the flagfall quota for honours and postgraduate students.

That market rates be charged for downloads over the flagfall quota.

Many respondents to our email question expressed concern about the costs that would result from the application of charges of 25-30 cents per download in excess of the flagfall quota of 25MB.

In an average day, [I] would easily use 10megs of download. Can we only do such work for 2.5days a semester?? Lets say we do about two days of such work a week = 20 megs a week. This is about the average in my Lab (much higher in some others). In a semester, that's 20meg x 26weeks = 520meg. 520meg x \$0.30 = \$156 megs. That comes to a grand total of \$343 per semester = \$687 a year. (Genetics and Molecular Biology Student)

The limit of 25Mb per student is somewhat short-sighted given the nature of online publishing nowadays. This would amount to about 3 journal articles downloaded in pdf mode, based on a typical Applied Maths journal. Beyond this then, each article downloaded will cost in the vicinity of \$2-00, which appears to be acceptable until you realise that you're often required to download the entire article to obtain the abstract so as to ascertain the usefulness of the article. For example then, a student downloading only 5 papers per week for say 48 weeks would be expected to pay a bill not too far shy of \$500! An especially industrious student might then be facing a bill of well over \$1000! (Applied Maths Postgrad).

In part many of these concerns may be allayed by the introduction of a more realistic flagfall quota. Nevertheless, a number of respondents were critical of the cost structure proposed. They point out that the charges of 25-30 cents are approximately double the market rate.

These criticisms are quoted below:

Although it seems fair to impose some limits on students, the 25MB figure is ridiculously low. In addition, the volume charging rate is extremely high - Telstra BigPond Direct, for example, charges at 13.2c/MB for data passing through their web proxies (see URL below) http://telstra.com.au/bigpond/direct/proxy_pricing.htm. The university should be charging its students no more than this number - probably less in fact - but the proposed fee is actually around double the market rate!

This looks like ITS trying to make money. The telstra premium bulk rate as of about a year ago (I imagine it to be lower now, but I don't know the exact value) was about 18c per MB.

It is also worth noting that personal accounts with ISP's are cheaper than the proposed rates at University. Numerous students have home ISP accounts that cost \$1 per hour with unlimited download size. For post graduate students this type of fee structure would be a large improvement. To view journal articles provided online, the paper must be downloaded. In undertaking this activity, a student during the week 10-16 June 2001 in our department used 7 minutes of internet time for 3.5MB. In an hour, that equates to 30MB. This exceeds the quota in a single hour of internet usage, and induces a cost of \$1.50. (\$9 if the quota had been exceeded previously) Other students also mentioned the download of electronic journal articles produces download sizes equivalent to this (30MB per hour). As electronic journal articles are an essential part of PG research, the cost of internet usage becomes a major concern. This media is also becoming the preferred.

IT Services claim that "there is no profit making component in the scheme proposed here."⁵ However, the rates proposed are clearly designed to make students to pay more than for the data being downloaded. Students are paying for the cost of infrastructure, network management tools, the licence fee for the monitoring system, and labour costs.⁶ Surely these infrastructure and system costs need to come out of the operating grant of the University.

Recommendation

Charges for downloads over quota must reflect market rates.

⁵ S Snyder, op cit.

⁶ Ibid.

A consistent and transparent system across the University

It has been proposed that departments be charged for postgraduate use.⁷ In the current fiscal climate within this University, departments are likely to impose charges on students (either directly or out of research funding allocations).

The PGSA already has concerns about significant differences between departments in the allocation of resources and facilities to honours and postgraduate students. It must be recognised that there are considerable differences in the financial situation of many departments and costs centres. As a result some departments may be able to grant their postgraduate students larger flagfall quotas and lesser charges than those adopted by other departments. This will result in many inequities, anomalies and discrepancies between departments. There is also the question of how this system will incorporate students enrolled in more than one department or cost centre.

As one student commented:

This proposal doesn't ... accommodate for different budget allowances for different departments. The poor departments will be less able to afford paying for students than rich departments.

Students also need to know before they commence using the internet what restrictions and charges they face.

Finally, if any charge is to be introduced, I think each department should be required (*a priori*) to inform students as to the exact proportion of the cost which will be passed on to them. It would also seem sensible for the fee to be introduced from semester 1, 2002. This would allow all postgraduate students to find out how much they would have been charged based upon how much they have downloaded this semester.

Recommendation

The PGSA recommends that a university wide base line quota be allocated for postgraduate and honours students, and that departments be able to increase this quota according to established need. Further, that students will be informed at the beginning of each semester as to the exact details of any restrictions and costs involved in using the internet.

Key areas of usage should be exempted from the system of charges.

As discussed earlier in this submission, the internet is an essential research and study tool. The impact of the charging system would be greatly reduced by introducing the following exemptions:

- **Student email should be exempt.** Email is an essential and rapid communication mechanism. Most students communicate with supervisors and lecturers through this medium. It is also a crucial means of maintaining links with international researchers. In addition, Departments, Faculties and the University Central Administration all use student email lists as a means to send out important information to students. It is vital that students not be prevented from using this communication tool and from accessing important University notices.
- **Downloads from internal University websites (the intranet) should be exempt.** The University's web pages contain vital information on academic programs, courses, academic policies and services. More course materials, assignment questions and other resources are being placed on line. This trend will certainly increase. In addition, students can now view and amend their enrolment on-line through SOLAR and we believe that this trend to automated administrative processes will grow in the future.

⁷ S. Snyder, op cit.

- **Access to electronic databases, electronic journals and other electronic resources through the library should be free.** The University contains a wealth of information included exam papers, databases and text documents in electronic format. Many students search for material using on-line search facilities. Moreover, the University library has ceased receiving a significant number of journals in hardcopy format – increasingly using electronic journals instead, and has embarked on a program to convert a greater number of journals to electronic format. It would be a gross injustice to prevent students from using their own library resources. We wish to stress that it not sufficient to provide free access to the Library’s databases and electronic search facilities. The library purchases (from external sources such as publishing companies) its electronic journals and links to electronic information. Access to electronic-journals and texts linked to the Library through external websites must be exempt, or the size of the flagfall quota increased significantly to enable honours and postgraduate students access to these electronic resources.
- **Access to clearly identified educational sources and data-bases should be free.** We understand that students will not be charged for access to Flinders University and University of South Australia resources via the internet.⁸ This should be extended to all University sites in Australia and worldwide, and to government sites and recognised research data bases.

⁸ Correspondence from Ian Creagh, Executive Director, Division of Student and Staff Services, to the President of the Overseas Students’ Association, dated 18 June 2001.

The Consequences of Punitive System of Quotas and Charges.

If the University decides to pursue a system of charges for student use of the internet that does not take into account the study and research needs of its postgraduate and honours students, then there are likely to be major consequences for students and the University. These are:

Cost to students

As our responses demonstrate, students who already pay either expensive full-fees or an increasingly large HECS fee are outraged that they may be forced to pay further fees for access to the internet. Ideally, students should be able to obtain a university degree free of charge, and the existing fees are already exorbitant and deter a large number of 'disadvantaged' students from entering university, or after completing an undergraduate degree from then progressing to a higher degree. To quote three respondents:

Adelaide University is indeed making study and research too expensive for student budgets. If the university wishes to boast students excelling in their fields then they need to provide the resources to match. Education is yet again at risk of becoming further elitist by fostering a consumer approach to learning. Students already face an exorbitant fee structure through their HECS, in addition to statutory fees and expenses for textbooks, lecture materials, printing and so forth. Further expenses mean that students have to either work more thereby decreasing their study time or simply miss out on vital resources.

As an international student this will maybe even be more restrictive to me than Australian students. My tuition fee amounts to 20 000 AUD annually and if I am billed for using the Internet I will be forced not to use the Internet anymore. As a Ph.D. student I use the Internet for extensive searches on topics in my field of study, download articles and correspond with a number of researchers locally and abroad. It will therefore hamper my research greatly.

I sincerely hope that the University realises the significant difficulties this decision will impose on post-graduate students. I work in the lab about 60 hours a week and get paid around \$360 by my scholarship. This works out to about \$6/hour; I don't understand why I should be expected to pay for the privilege of being the University equivalent of a 'sweatshop' worker!!

Student recruitment

At a time when recruiting large numbers of postgraduate students, and in particular international postgraduate students, introducing a policy which is likely to deter students from choosing Adelaide University is ludicrous. As our responses demonstrate, many students will choose another university if faced with additional charges at this university. The students most likely to be put off by the introduction of internet charges are the very students that the University is supposedly most keen to recruit ie international, science, medical, and IT students. The University should also consider the message that such a short-sighted and 'old-fashioned' policy sends to potential staff and investors. Adelaide University would be seen to be an academic backwater, not a cutting-edge and world-class university. To quote just a few of our responses:

The University needs to be aware that should this situation arise I, and certainly any coming after me, when faced with such a situation will be faced with the need to select another institution, such as Wollongong (or any other with such enlightened policies), and choose to do/move my research there in preference to Adelaide.

In addition, for many overseas post-grads, the internet is a way to keep in contact with their families, work colleagues, and culture. Forcing them to pay for this would be unfair and likely reduce the number of post-grads coming to Adelaide from overseas.

Research output of the University

It follows that if 'top-flight' students, staff and investors are discouraged from aligning themselves with Adelaide University then the research output of the University will suffer. As demonstrated in the emails we received from students, many postgraduates would not be able to continue with their current projects if access to the internet is curtailed.

Without access to the latest research and data, research at this University would stagnate and publications would dwindle. Adelaide University is on the brink of being labelled as isolated, ‘old-fashioned’, and behind the times, and certainly not as one of the world’s finest universities.

As a number of the respondents to our email question commented:

Even if the Department is prevented from passing on the costs of internet usage to the students, we may still be indirectly disadvantaged, as the cost of establishing a research laboratory at Adelaide University will undoubtedly become more expensive, perhaps encouraging top-quality researchers to go elsewhere, and lowering the standard of research for which Adelaide University is supposedly recognised for.

By restricting internet access through a) limited “free” downloads per semester and b) subsequent artificially high (dare I say revenue raising) rates per meg, Adelaide University obviously aims to isolate itself even further from current and active centres of research worldwide ...

False Economy

As demonstrated in the emails we received from postgraduates, agreeing on an appropriate level of internet downloads, and finding a fair and transparent means of billing departments (and inevitably students) is much more difficult than it may have initially seemed. It would appear that if the University calculated the cost of the labour it would take to accurately track internet use, bill departments, departments to bill students, manual adjustments and special exemptions taken into account and so on, that this would cost many staff hours to administrate. Have the sums been calculated to ensure that this unpopular and time-consuming exercise is cost effective? This concern was raised by the following student:

I also wonder if the introduction of this quota is really an economically viable option. When you consider that a person, or people, will have to monitor this information and pass this information onto students (at regular intervals over each semester so that students are aware of how close they are to exceeding their quota), then bills will have to be sent out at the end of the semester and money collected at the appropriate time. Will the university be prepared to pay additional staff members to cover this increase in work and will this be less than the money spent on recreational Internet downloads at present?

Conclusion

The PGSA urges the University to re-think its proposal to charge all postgraduates (via their departments) for internet use. As the volume of responses we have received demonstrates, this proposal would be extremely unpopular and would harm the output and quality of research being conducted in the University. It may also prove to be a false economy due to the fact that tracking and billing for internet use would be a lengthy, difficult, and therefore costly process. In recent years, the University has saved funds by cutting the number of hard copy journals and transferring to electronic journals. If students are unable to afford to access electronic journals and data, then the Barr Smith Library will be forced to re-order expensive hard copies which would then be available to students on an equitable basis.

Should Adelaide University be sending a message to its current and potential students, and to the community in general, that only students who can afford to buy the resources that are required to graduate, can afford to enrol at Adelaide University?

Appendix A: Summary of Student Responses

1. The internet as an essential research and study tool

- The limit on downloads seems unreasonable. From my perspective as a PhD student studying Microbiology, I frequently download publications in the form of pdf files to keep abreast of a rapidly moving field. The main reasons for using online journal articles is that it saves a great deal of time and money (when compared to photocopying articles in the library), the library often does not hold the required journals, and new articles may take weeks to appear in the library. Each of the pdf files range from ~150 kb to 1 Mb depending on the length or the article and the number of photographs and figures. Hence, a limit of 25 Mb per semester will limit the number of articles that I can look at to perhaps around fifty. In the course of an average week I would look at perhaps five articles taking my usage over the quota within one semester. The above calculation of usage also does not take into account performing literature searches on line, using on line molecular biology tools, using online sequence databases and other services. Each of these activities are frequently required by students such as myself, and may requires a large amount of data transfer over several hours. Access to such services are essential for my studies, and the studies of many students in similar fields to myself, hence limitations on downloads could seriously impact on my ability to work.
- Law students need to use AUSTLII and WESTLAW research sites on a regular basis for genuine research purposes (we certainly don't use them for fun!). AUSTLII provides us with the most up-to-date cases and consolidated legislation available, and is an essential research tool. WESTLAW is a new legal research tool (that we've just paid big bucks to get connected to and had reps come and teach the kids how to use it) and is **incredibly** helpful for essay research, etc. Particularly useful for Honours students like myself...

Whilst Austlii is available from home computers, WESTLAW is only available to law students at the University. Then there's ALICE - online law tutorials which are often marked and almost always compulsory...Unless student email, AUSTLII, WESTLAW and ALICE were all free of this download quota - I think the University would have a lot of very angry Law students on their hands.

- 25MB is **nothing**, even for an undergrad. For example, most 1st yr Computer Science undergraduates will download a copy of the Java Virtual Machine so that they can work on their programming assignments at home. This alone (J2SE 1.3 linux binary) is 27MB **without** documentation. The documentation (required) is a further 23MB. CS students don't have access to floppy drives or any other removable media to take their assignments home. So they FTP them to external ISPs and then download them; then do the reverse to get the finished code back to the uni. A given assignment with all data might occupy a good fraction of a MB and a student will do this once every month or so. Per subject.
- All students involved in molecular bioscience research use the internet regularly for accessing essential bioinformatics databases (eg DNA protein sequence databases) and services as part of their undergraduate education or postgrad research work. Not to mention that most research work of any kind is now done using the internet. For example, all my research of scientific literature is done online using PUBMED for example and online e-journals for which the university has subscription. The excuse that these charges will prevent "recreational" use of the internet is no justification for introducing such an unfair cost for those of us that can least afford it!
- What about when internet use is the actual research? ie submitting DNA sequences to external databases for analysis. This is akin to paying for your own chemicals to do your research. (PhD Student Molecular Biosciences)
- As an Electronic Engineering PG there are many legitimate uses that require large downloads such as
 - Research papers. There are many papers (most taking several MBs) that are extremely useful that are not available in the library. As a research student, the only way to keep current on "hot" research areas in on the internet. The library also does not have the full range of publications. Technical and internal documents from organisations are also not available other than on the web. I often stumble onto interesting papers when I go searching. I also have downloaded bad or irrelevant papers that I deleted later. You can't always

determine the relevance or quality of the paper from the title and the abstract unless you download and read it.

- Research data. A good research paper/thesis is one that tests ideas on other people research data to prove/verify/quantify the work. These data-set can be extremely large (ie. Signal processing data can be in tens or hundreds of mega-bytes).

- Research software. Simulation programs are essential tools to many areas of programming. Some of us work in very specialised areas where we are the only user of these programs. These programs are updated often and require constant maintenance which would put a burden on local IT staff if they were to maintain them. As a result, most (including myself) have downloaded, install and maintain these ourselves.

- The field of electronics is moving at such a rapid rate that the conventional "library" can no longer keep a researcher up to date. As a result, I rely on web browser to obtain information and news. (ie. conference have web pages, useful information from home pages of other PGs/Academics/Researchers around the world).

2. The Internet is a key source of essential and free software for student research

- (ANRS postgrad) I use the internet quite a lot for my study. I am creating a computer based model ... and need to use up to date software. Some of the software (well almost all of it including OS) comes from the internet. Most of it I can get from the Australian University mirror site but the major one I have to download from the States. If I am to remain up to date, which is not a matter of pleasure, I have to download a new version of at least one of the program's per semester. As they are from 50 MB up in size I would start paying before my first download is complete.
- My thesis was written entirely on downloaded freeware (I use LaTeX, partly because I try to avoid Microsoft products, partly because I find that I write more fluently with a text editor than with a word processor, and partly because it produces a better-looking document). Perhaps half of my statistical analyses were done using downloaded software or downloaded libraries for specialized analyses with commercial software. Some of the graphs and diagrams were made with downloaded freeware, and the graphics and printing were all ultimately handled using downloaded programmes. I am also using LaTeX for making overheads and presentations; this software was written by people who know about typography and typesetting, so the results simply look better than the output produced by Microsoft products. And it doesn't cost anything! Much of this software was written by the international academic community for academic use. Somehow this point appears to elude those who rule our academic lives.
- As for postgrads, on average, I download an academic paper every few days. These average 100-400kB, so call it a MB a week. A PhD thesis is about 5MB or more. There's 50MB per year. Those of us [in computer science] working with implementations and clusters of computers occasionally download images of operating systems to install. An install might consist of 2 to 4 ISO CDROM images (650MB each) or a direct ftp transfer of an equivalent volume of data. In my first days as a postgrad, I built my own copies of gcc, gnome, gimp, gtk, latex, X and a few other things for my desktop machine. There would have been maybe 500MB of downloaded source to build all that. I install a new linux kernel once every 3 months; each is a little over 20MB.

3. Electronic journals are key source of information

- As a postgraduate student I depend on the internet for access to journals and all the relevant up-to date information concerned with my field. (Environmental Biology PhD student)
- As a chemistry research student, the charging of internet access seems a bit much. The library has been cutting back its subscriptions to chemistry journals on a yearly basis, thus in some cases the only way to keep up-to-date with the literature is via the internet (especially for the online journals).
- I'm concerned that the proposed charges for internet use could significantly reduce the ability of postgraduates to access information that is only available over the net. Like most science postgrads, I download a large number of papers and images in PDF and image formats. Many of these are only available

electronically, since the library does not subscribe to the print version. These papers and images are often essential to my work. This need could be reflected in exemptions from any download limit for postgraduates accessing PDF files. Alternatively, the download limit could be set at a higher level for postgraduates, since a higher proportion of our work is research-based than in undergraduate courses. (Postgraduate student Molecular Biosciences).

- In my experience downloading articles from some of the journals that are available through university links mean that I have to go outside the university network to access them and to get the PDF file. As a PhD student it would not take many of these to add up to my quota! (I am assuming that internal university downloads will not be part of the quota?). Printing these are not cheap through the uni either! (Psychology postgraduate student)
- Restriction on downloads from the internet can only damage the research potential of this university. I'm currently doing a PhD in medical informatics, and internet access is a vital aspect of this project. Many medical journals now offer online subscription, and the Barr-Smith library is taking advantage of this services. This both increases convenience and accessibility as we can not only download the full text articles, but also unpublished data associated with each study. These data can be quite substantial to download, yet essential for the studies to be correctly interpreted, and greatly beneficial for analysis. Last year, for my honours project, I reviewed over 400 articles. Given that a pdf of each article is, on average, about 200Kb, this equates to 80Mb of downloading, not including any other data. Some data downloaded for a project last year came out to be 375Mb in size. This was vital for the analysis and evaluation of the project. Being asked to pay for this would add extra financial strain, and most probably discourage the retrieval of these data and articles.
- Mathematical and Theoretical Physics are areas of research in which people publishing papers will publish their work either solely on the net, or in conjunction with a hard copy journal, however their research may take up to a year to appear in the Barr Smith Library Journals. As a result of this almost all research material in these fields is downloaded from the net. Personally I would have to say that 25 MB/semester would be an exceedingly small amount for researchers in these fields.
- One thought I have on how this impacts post-grad students is that the library is increasingly subscribing to journals in an online format only. EVERY article, depending on the number of figures is approx 200-500k to download in PDF format. So as well as having to pay an increased price for laser printing, as opposed to photocopying we will now also have to pay for the download???. These are all small changes that can easily be justified, but the problem for the student is that they accumulate. And one other thing that is probably more applicable to research PhD students as opposed to coursework. What about when internet use is the actual research? ie submitting DNA sequences to external databases for analysis. This is akin to paying for your own chemicals to do your research. Are they serious? Are students going to have to individually negotiate with Departments what constitutes 'personal use' as opposed to laboratory research?
- Our library is going increasingly online, and substituting hardcopy Journals for Online access. Last week alone, I downloaded about 7 journal articles. Typically these are PDF documents, and range from 500k-3megs EACH. Last week, my Documents alone were 25megs.. now the university wants me to pay for the other 25 weeks of the semester?? (I am a postgraduate student, so a semester is much longer for me). Lets do the sums now: So for 25weeks x 25 megs a week (For journal articles) = 625megs a semester. Then multiply that by \$0.30 = \$187.50!!!!
- The university has been under funding the Barr Smith Library for years, and so access to recent journals often requires Internet access. Many of these are downloaded as Adobe Acrobat PDF files, not standard web pages. These documents often exceed 2 or 3mb each, and so would therefore blow any 25mb usage restriction very quickly. I was under the impression that we were meant to use the Net instead of relying on the BSL... Is the university going to allow us to claim that we had inadequate resources, should we fail to access current research, just because we have restricted Net access? What sort of quality does the university expect its students' PhDs to be, if Net access is restricted? - Is the university going to similarly going to lower PhD requirements? If the university wishes to be one of the world's great institutions by that mythical date of 2022, then this is certainly one way to stop that happening... Adelaide University students WILL be denied access to cutting edge research and information, should this misguided, totally idiotic policy of limiting Internet access be applied. (PhD student Centre for European Studies)

4. The value of the internet for other essential aspects of postgraduate and honours students study, research and teaching.

- Most other research tools are now internet-based. Telephone directories, reference search engines, on-line texts, email and other resources are all essential for the success of the modern student, and particularly for the researcher.
- The second factor which needs careful consideration is the impact teaching has on a postgraduate's demand for the internet. Many postgraduates teach and it seems reasonable that from time to time, they will need to download articles etc. from the net.
- On-line text books are becoming quite popular, and I am quite a regular user. All of these sites come with multiple advertising banners, all of which are classed as quite substantial downloads, so using these sites would soon put you over the limit. Most of these sites require that the banners be visible, so selecting not to see them causes the page not to load.

5. The internet as a communication tool

- Email has become the essential form of communication for me, which includes the transfer of files between myself and my supervisor, outside agencies and other colleagues. I presume the download quota would extend to email accounts. I would be more than angry to have that affected by internet fees.
- Many students use Web based mail services such as Yahoo, for their every day e-mails. This means that they receive, often large, but otherwise frequent e-mails from other students and staff. From my experience up to 1.5 or 2 megabytes per day is not uncommon. Due to this reason, I feel that a 25 Megabyte flagfall quota is much too small.
- With the university using a web-based email system, it is virtually impossible not to spend time on the net. In addition, those students with supervisors not in the same physical location often email documents and receive them in large numbers, as they are sent for revision and returned.
- I'm not sure whether the restriction is just on web/ftp access or whether email access is included. But my email alone easily past this quota in a month due to attachments.
- Access to the internet is crucial for my studies, most information for my thesis being on the web, and my contact for all my interviewees currently by email.
- [T]he university introduced website based e-mail which has increased use of the Internet throughout the university dramatically.
- Student email is not great for sending large files or messages due to space restrictions, but the multitude of free email services allow a lot more flexibility. All of these services have high download rates (advertising, layout, etc.) but are extremely valuable to the student.
- I am completing honours off campus and the limited time I get in the Barr Smith Library must be used to the maximum productivity: Less time searching the shelves and more time reading and printing articles online. The online journals and full text articles available enable me to Email them to myself where I can read the text more thoroughly and print the necessary articles also saving me photocopying money (at times I have often spent \$30 at a time photocopying). The internet is vital in this regard and I am sure I have downloaded well over the proposed limit already, all for legitimate research purposes. Articles I use are generally large and have photographs and big images (500K).
- As an external student of the post grad HDU course I had to rely heavily on Internet access. If IT became even more expensive it would certainly cause concern among country students. I would recommend that the IT people need to address the issue of not being able to access full text articles easily.

- Some subjects (for example English Honours) have mailing lists that are a compulsory component of the course. Perhaps subjects with an internet component could allocate an extra download allowance and students doing those subjects could have their quota added to?
- Automation of procedures like enrolling, handing in work, etc. all takes up download space.

5. Using the internet is an essential skill

- The trend world-wide is for a need for people to become more familiar with the internet, not less. I believe that at the least, a limit more like Wollongong Uni's would be the more appropriate move. Ideally, students' use of the internet should remain free, regardless of whether it is "recreational" use or not, as it is contributing to the all-round IT education of Uni of Adelaide graduates, a skill which is highly valued in today's workforce.
- The internet is a vital part of each and every academic future, the University itself places increasing emphasis on the internet as a learning tool, why then go on to limit each students access?

6. On the question of recreational use

- I can understand that the university is concerned by the excessive amount of Internet use and that some of this may not be for educational purposes, but I feel that other alternatives may be possible. For example, instead of placing a quota on all internet use, place blocks on some kinds of downloading (such as mp3, real audio and real video files or excessively large files that can be costly) which can only be accessed with special permission from ITS. This would reduce the amount of files that are downloaded for recreational use (such as napster and live feeds from websites such as 'Big Brother') but not interfere with Internet use for legitimate purposes. In the very least, a much larger downloading quota must be considered so that only people the use the Internet excessively will be charged. For example Telstra offers 300MB per month with 20 cents for each additional megabyte which would be much more suitable.
- There are certainly some "bad apples", especially at undergraduate level, who download far more than most other users, and the university may benefit from seeking them out and placing restrictions. However, placing these restrictions on everyone and making them this tight is draconian. A more appropriate policy would perhaps be to identify the abusers and, after warning, limit their access privileges.
- I do agree with the university charging for internet use over a certain amount as the number of times during undergrad I found that when I needed to use a computer in the university I couldn't as another student was accessing the internet for non-uni related things. However, I think that the limit on free downloads is far too low.
- Instead of making us pay for the internet why not ban sites that people are abusing and making the rest of us have to pay?
- If the problem is as stated as being to curb "recreational" use then why not address that problem? Surely there is a less draconian approach available. Or is this just a badly disguised attempt to grab some more money for IT.
- Now that the Uni has introduced a system for tracking which internet sites we have visited, couldn't this be used to perform a survey and determine exactly how much internet use is actually for recreational purposes? My bet is that legitimate use of the internet by post-graduate students would far outweigh any recreational use. I cannot speak on behalf of undergraduate students, who perhaps do contribute significantly to recreational use, but why should we be penalised for their poor judgement?
- Perhaps the university needs to actually confront people who are abusing the system and simply ask them politely to only use the computers for study purposes, instead of limiting the access of the entire student body.

- Another suggestion is to bar some types of file downloads to some students eg students studying engineering probably don't need to download music files whereas music students probably have legitimate reasons for downloading these file types.
 - Frankly I do not have time, none whatsoever, to waste on the internet surfing absurdly or downloading music files.
 - Recreational net use eh? I wish I had the time!
 - I'm a Post Graduate student (Masters) with AME and would like to strongly object to the proposed charges for internet use, for a number of reasons. First of all, I'd like to point out to IT and others that I, and most other postgrad students, don't have TIME to use the internet for recreational purposes (if only we did!). 'Recreational use' should not be a valid reason for internet charges to be laid onto Postgrad students.
 - I would encourage the university to make use of the research expertise within the university and provide some evidence to support any moves they might wish to make.
 - This is clearly a cost cutting exercise, with an unsubstantiated claim that is supposed to back it up. What reason have they given for making this conclusion about too much recreational use?
 - I would challenge the IT branch to demonstrate that most IT use is or "recreational" purposes. I use the internet for my research and future job and study possibilities.
 - Also I think it would be important to challenge the notion that just because IT seems to have some impression based on who knows what that most internet access is recreational. It is difficult to tell, in my case for example because film is an area of research there are sites where I can view films, if this were viewed out of context it may look like I'm simply having fun...
 - The division between recreation and education can often be hard to distinguish, and certainly how the IT staff interpret internet usage would be quite different to most students.
 - It is very sad to impose barrier in Internet uses. It seems to me trying to cure headache by cutting head. Needs of recreation for a student is recognised by the university. Olden day recreation came from physical activities. Now almost all of them are available in Internet. So I believe if necessary budget allocation for student recreation should be reallocated.
7. **A quota of 25MB would not meet the study and research needs of postgraduate and honours students**
- [25 MB] is indeed a very small amount, costing approximately \$4.50 if composed entirely of international traffic purchased at premium Telstra rates. About half that if within aarnet.
 - I would have thought 500meg would be a bare minimum. 25 meg is pathetic.
 - I agree that there should be some limit to the amount of downloads per student, but I believe that 26 megabytes is far too small an amount. 100 would be preferable, especially for those who are forced to use the internet for their courses.
 - I am in my third year of a PhD in Civil and Enviro Engineering ...The use of the internet has become a major topic of discussion among PG's in this department. We got wind of the proposed charges to internet usage some time ago, and brought up the matter with our department directly. In order to gain an understanding of the MB usage of each student, we also asked the department to produce monthly reports on the PG usage, so we could get a feeling for how much we actually use and therefore how much we would subsequently be charged. The interesting fact is that most students thought downloads related to files and the like, when in actual fact every page has a download size. The more images, the larger the size. If the cache is not set up correctly, then sites like google, yahoo etc will be 'downloaded' every time the next ten

search results are accessed, which can lead to large downloads in every internet search. As for our PG's, there were numerous occurrences of PG's exceeding 25MB in a fortnight!

- My suggestion is a download limit of 250 MB per semester for general use and the option to pay say \$30-\$50 per semester for unlimited use. At least this would give students a choice.
- I could easily reach the 25MB quota in a week or so on legitimate uses. And in a semester could eat a significant chunk of my scholarship all in the name of research. (Electronic Engineering Postgrad).
- I'm a research postgrad in the Electrical & Electronic Engineering department. I work in a field which is rapidly changing, and the only way to stay on top of news in this and related areas is the internet. In terms of simple web browsing of industry-related news sites - which I do daily -I'd be easily clocking up at least a couple of megabytes per day. I also frequently download research papers, bibliographies, and the results of bibliographic searches which would make this number rather higher. In addition, I need to download various software packages on a regular basis to perform my work. Some of these packages are a few tens of megabytes, and occasionally exceed 100MB. Updates also need to be downloaded from time to time, and these would contribute at least 100MB/semester (for my legitimate use). This has probably been accelerated to some extent by the open-source movement, however it is still cheaper (and better) than paying Microsoft et al. Clearly the 25MB per semester limit is untenable - I would legitimately use this much within a couple of weeks for web browsing alone.
- On average I would download 3 papers per week as .pdf files from the various journal web pages that the university subscribes to. The size of the downloaded files varies, from ~1MB to ~5MB. Say at an average of 2.5 MB, over the 26 weeks of the first semester (given that postgrad students are present throughout the year, and not just during teaching semesters), this works out to an average of 195 MB per semester. (Environmental Biology PhD)
- 25Meg is much too low a semester limit for (free) downloads. 100Meg would be a bare minimum (for overseas sites only - most chem. journals are foreign). Chemistry Postgraduate student.
- It is instructive to consider 4MB/hr usage as a standard. For undergraduate students, 25MB therefore is a disgrace. Their usage should be more like 250MB/semester. Honours students (and any fourth year engineering student) should be included in postgraduate ... A postgrad student should have 1.5G/year or none at all ... they should be considered the same as staff and get the same privileges as they're the ones that use it the most. ... For a postgrad, the newer medium of electronic publishing of papers in pdf would murder a quota easily, especially when you consider 500k as an average per paper! Include also searching in yahoo/altavista etc and you get the picture! (Physics PhD Student)
- Internet usage has become a major topic of discussion among PG's in [Civil and Environmental Engineering]. Some time ago we were informed via our Departmental Computing Officer of the possibility of internet charges. In order to gain an understanding of the MB usage of each student, we asked the department to produce weekly reports on our usage. On average, the PG's in our Department use 9MB per week per student. This equates to 240 MB per half year ... We believe the quota of 25MB is extremely low and in no way reflects how important the internet is to undertaking postgraduate research. Ideally we would like to see charges scrapped for postgraduate students, however understanding that this is unlikely, most students in our Department could manage a half-year quota of 175-200MB per student. An alternate solution would be to introduce a quota of 100MB and once a student reaches this quota, he/she needs to show that the majority of use (85-90 %) has been research related. Once the student has met this criterion, they are then extended to 175 or 200MB. This system may be presently used at another University (Newcastle we think).

8. Concerns about the cost

- Although it seems fair to impose some limits on students, the 25MB figure is ridiculously low. In addition, the volume charging rate is extremely high - Telstra BigPond Direct, for example, charges at 13.2c/MB for data passing through their web proxies (see URL below) http://telstra.com.au/bigpond/direct/proxy_pricing.htm. The university should be charging its students no more than this number - probably less in fact - but the proposed fee is actually around double the market rate!
- This looks like ITS trying to make money. The telstra premium bulk rate as of about a year ago (I imagine it to be lower now, but I don't know the exact value) was about 18c per MB.
- So, if these charges were instituted, I would be effectively prevented from working at the university, since I rely heavily on the internet for my research and software needs. Thus I would be forced to either move to a different university or do all my work from home. The latter option would require me to put up with very poor modem access (I can't get cable or ADSL at my location, and my phone line can only do 28.8kb/s) and pay more for it so I can stay permanently connected, as well as not being able to access the same range of software available on the University network. Even so, this would still be significantly cheaper than working at the University under such a regime. I would seriously consider switching universities if such restrictions were instituted, despite the fact that I am generally happy with the way things are at the moment.
- Increasingly, the world of Genetics and Molecular Biology (anyone heard of the Human Genome Project??) is going online. Online search tools, sequence analysis, pubmed literature searches, online scientific discussion groups, online-only scientific Journals, online gene/protein search facilities. In an average day, doing such work would easily use 10megs of download. Can we only do such work for 2.5days a semester?? Lets say we do about two days of such work a week = 20 megs a week. This is about the average in my Lab (much higher in some others). In a semester, that's 20meg x 26weeks = 520meg. 520meg x \$0.30 = \$156 megs. That comes to a grand total of \$343 per semester = \$687 a year.
- It is also worth noting that personal accounts with ISP's are cheaper than the proposed rates at University. Numerous students have home ISP accounts that cost \$1 per hour with unlimited download size. For post graduate students this type of fee structure would be a large improvement. To view journal articles provided online, the paper must be downloaded. In undertaking this activity, a student during the week 10-16 June 2001 in our department used 7 minutes of internet time for 3.5MB. In an hour, that equates to 30MB. This exceeds the quota in a single hour of internet usage, and induces a cost of \$1.50. (\$9 if the quota had been exceeded previously) Other students also mentioned the download of electronic journal articles produces download sizes equivalent to this (30MB per hour). As electronic journal articles are an essential part of PG research, the cost of internet usage becomes a major concern. This media is also becoming the preferred media with the library spending significant funds on electronic journal subscriptions. (Civil and Environmental Engineering Postgrads).
- The limit of 25Mb per student is somewhat short-sighted given the nature of online publishing nowadays. This would amount to about 3 journal articles downloaded in pdf mode, based on a typical Applied Maths journal. Beyond this then, each article downloaded will cost in the vicinity of \$2-00, which appears to be acceptable until you realise that you're often required to download the entire article to obtain the abstract so as to ascertain the usefulness of the article. For example then, a student downloading only 5 papers per week for say 48 weeks would be expected to pay a bill not too far shy of \$500! An especially industrious student might then be facing a bill of well over \$1000! (Applied Maths Postgrad).
- I wish the university would be honest about this, and simply state that it is trying to make up for a budget shortfall, rather than trying to blame students for the high costs of internet use. I would feel better about it then.
- This proposal seems suspiciously like revenue raising by the university.
- My understanding is that the university pays Optus a fixed annual charge (about \$300, 000) for usage of the line (or whatever it is called) that enables internet access regardless of the actual usage. Put alternatively, the uni pays the same amount for the line regardless of how often it is used.

9. General financial hardship issues and this is just another cost for an essential service

- Adelaide University is indeed making study and research too expensive for student budgets. If the university wishes to boast students excelling in their fields then they need to provide the resources to match. Education is yet again at risk of becoming further elitist by fostering a consumer approach to learning. Students already face an exorbitant fee structure through their HECS, in addition to statutory fees and expenses for textbooks, lecture materials, printing and so forth. Further expenses mean that students have to either work more thereby decreasing their study time or simply miss out on vital resources.
- It is very disappointing to hear that the university proposes to charge students for internet use. Students already pay ever increasing fees, and I see no need for yet another money raiser. Postgraduate students, in particular, should not be charged. I would certainly hesitate as to whether to download something in relation to my work, or even just browse on the internet, if it were going to be at my expense. The university should be glad and proud to attract students who will bring it recognition, and probably be the staff of the future. More fees will just make it more difficult for some people to attend.
- As an international student this will maybe even be more restrictive to me than Australian students. My tuition fee amounts to 20 000 AUD annually and if I am billed for using the Internet I will be forced not to use the Internet anymore. As a Ph.D. student I use the Internet for extensive searches on topics in my field of study, download articles and correspond with a number of researchers locally and abroad. It will therefore hamper my research greatly.
- Now ironically, not only are we charged fees for having lecturers but now we will be charged to communicate with them! Access to Knowledge will be limited and bibliography reduced because we cannot afford to stay in touch. And it will only be the wealthy left in a position to charge ahead in research because they can afford the expense - for the rest of us, it's another nail in the coffin of university education.
- It sounds like they have forgotten that not everyone has access to the internet at home. What are we paying for with union fees, HECS etc. In some courses we only get 1 lecture per week, two hours of seminars (30) people and hours on the internet doing assignments. We get no feedback and our passing or otherwise is heavily weighted to exam skills. I'd like to see little more transparency from the bespoke gentlemen!
- I am disturbed by the prospect of introducing yet more fees for students who are often on low incomes and/or have little spending money for research. It would be a disgrace for such an essential service to be billed to the student. It already costs a student thousands of dollars to pay HECS debts, student fees not to mention the cost of text-books, stationary, photocopying etc etc. Further increases to fees I feel only disadvantages the less well off students in their achievements at University.

10. Administration of charging via departments

- Finally, if any charge is to be introduced, I think each department should be required (*a priori*) to inform students as to the exact proportion of the cost which will be passed on to them. It would also seem sensible for the fee to be introduced from semester 1, 2002. This would allow all postgraduate students to find out how much they would have been charged based upon how much they have downloaded this semester.
- This proposal doesn't ... accommodate for different budget allowances for different departments. The poor departments will be less able to afford paying for students than rich departments.

11. Will deter both local and international students (and staff) from coming to Adelaide

- In addition, for many overseas post-grads, the internet is a way to keep in contact with their families, work colleagues, and culture. Forcing them to pay for this would be unfair and likely reduce the number of post-grads coming to Adelaide from overseas.
- This is the most ridiculous proposal I have ever heard. If and when the media (local and overseas) gets wind of this issue, it will become big (and distorted) news, sufficient to drastically reduce the number of full-fee paying overseas students (I will advise my wide Asian contacts to go to a Uni which allows unlimited

email/internet access). I am already unhappy that there is NO FREE dial-up access for Adelaide Uni students. [I have studied or researched at the following Unis (Murdoch, Melbourne and ANU) and Adelaide is by far the most backward!!!] The whole purpose of the Internet is to enable the start of a new research frontier. "Recreational" surfing is necessary for one to explore this new frontier. Why are we comparing with a Uni like Wollongong? Why don't we look at Unis in the US, Singapore and other parts of Asia? We will become a laughing stock! Suffice to say that Adelaide Uni will become the backwater of academia in due course (i.e. in the very very near future).

- The University needs to be aware that should this situation arise I, and certainly any coming after me, when faced with such a situation will be faced with the need to select another institution, such as Wollongong (or any other with such enlightened policies), and choose to do/move my research there in preference to Adelaide.
- Even if the Department is prevented from passing on the costs of internet usage to the students, we may still be indirectly disadvantaged, as the cost of establishing a research laboratory at Adelaide University will undoubtedly become more expensive, perhaps encouraging top-quality researchers to go elsewhere, and lowering the standard of research for which Adelaide University is supposedly recognised for.
- I don't believe that most of internet time was used for recreational purposes. Study in Adelaide was very demanding both of time and concentration. So entertainment is required to keep the stress, and one of them can get for free through internet. And they used this recreational time after they have all the study material done. Please rethink again about this and refer to other institutions such as Wollongong which give a better time for student working through the net. Adelaide is one of the reputable universities in the world. You have produced a qualified alumni/researcher etc. which have international recognition. Keep maintain this by giving a better training for their student. So when I return to my country I will be full of pride to be called Adelaide Alumni. Thanks.

12. Other comments/general complaints

- Another thing, the university pays for electronic journal subscriptions, so if a student downloads a copy of a paper he/she may get charged for that download. Now if twenty people get charged for the same paper (download), the university will have the potential of making large amounts of money from each subscription. How does this stand with copyright / royalty laws?
- As a post grad student I am very concerned with this news, especially if they are trying to bring this in so quickly. Is there some legal infringement here? ie changing services mid way through the year?
- I think that a 25meg limit is too small, at least 50 would be better if not the full 100megs as at Wollongong uni. The idea of a limit in itself doesn't worry me too much. Could there be designated sites that would not incur a download fee? Like anything downloaded from a .edu address would be free - at least from Australian sites?
- I also wonder if the introduction of this quota is really an economically viable option. When you consider that a person, or people, will have to monitor this information and pass this information onto students (at regular intervals over each semester so that students are aware of how close they are to exceeding their quota), then bills will have to be sent out at the end of the semester and money collected at the appropriate time. Will the university be prepared to pay additional staff members to cover this increase in work and will this be less than the money spent on recreational Internet downloads at present?
- Also, student email is now increasingly being used for staff / administration communication with students, with the old fashioned methods being abandoned. This would have to revert back to notices in pigeon holes and/or notices on white boards to be fair to students if the new system were imposed.
- By restricting internet access through a) limited "free" downloads per semester and b) subsequent artificially high (dare I say revenue raising) rates per meg, Adelaide University obviously aims to isolate itself even further from current and active centres of research worldwide ...

- For a University with the aspirations of Adelaide, its postgraduate students should be [one of] its prized attributes. Just as the University would not limit the number of books borrowed per semester from the library so it should not limit the downloads from the internet, as it will end up with the same effect. Limited downloads and prohibitive charges will stunt the diversity of study.
- This is a ridiculous scheme. The student is getting charged more and more for, supposedly, “Education for all”. Many students are unable to pay the fees now, let alone having additional payments. The rich kids will again get preferential treatment through obtaining higher marks from up-to-date information (pay for marks scheme!!). If someone can’t afford to have access to the latest information, how are you supposed to compete with people that can pay?? Is there going to be one education for the rich and another for the less fortunate?
- Sounds like yet another way to inconvenience poorer students -- the ones who would use the internet a lot at Uni because they don't have a home connection.
- What next?? Does the University intend on giving us a quota of books to be looked at (not borrowed or even opened mind you, just looked at), and then charging us to take that required text off of the shelf?
- For a clever university in a clever country, this is not very! This is crazy!! The internet has become an essential resource for post-graduate work, and charging for the use of it is basically equivalent to asking research students to pay for their own chemicals and reagents (maybe this is what they are planning next?!).
- I sincerely hope that the University realises the significant difficulties this decision will impose on post-graduate students. I work in the lab about 60 hours a week and get paid around \$360 by my scholarship. This works out to about \$6/hour; I don't understand why I should be expected to pay for the privilege of being the University equivalent of a 'sweatshop' worker!!
- It's obvious that for anyone involved in research who uses the internet as a resource (and in these days, who doesn't?) this limit on downloading is ludicrously inadequate. As a university supposedly dedicated to improving its research agenda and taking full advantage of the technology offered to us, this is a great step backwards.
- While I am sympathetic with the University's concerns that its strained budget is being squandered on recreational usage, the simple fact is that the suggested quota is woefully inadequate for serious research even at an undergraduate level. Furthermore, the whole point of the Internet is to provide for the free flow of information, and the cost of on-line research pales into insignificance when compared with the cost of maintaining traditional library resources of sufficient quality. It would constitute a grave mistake and an attack on the University's already tarnished image for academic excellence to restrict Internet usage by students, whether undergraduate or postgraduate. While the costs are not high, as evidenced by the fact that many students including myself do our on-line research at home, a per MB charge of the magnitude suggested could well influence the decisions of the poorest students as to whether they should download some materials for legitimate academic usage. A large piece of legislation plus its explanatory memorandum can easily take up a couple of MB; enough under the proposed tariffs to become significant to a student preparing a reasonably broad-ranging essay relating to several pieces. Recent large High Court judgements are similar in scale. It seems almost absurd to think of students having to regulate their usage in such a manner. In light of the University's ever-burgeoning administration, I find it difficult to believe that cost savings in this area are justifiable.

Appendix B: Email Questionnaire

Charging for use of the internet – have your say

Adelaide University Information Technology (IT) Services has recently proposed that a system of charges be introduced for student internet use. Under this proposal a system of charges for undergraduate students is planned for introduction in Semester 2 of this year.

Discussions with IT Services indicates that departments, schools and cost centres will be charged for postgraduate student use of the internet. It is likely that departments and cost centres will pass on these charges to postgraduate students for their internet use.

At this stage we have no information on how departments and cost centres will charge postgraduate students, so we have provided the proposal for undergraduate students as a guide to what the University or departments and costs centres may charge postgraduate students.

The proposal for undergraduate students (which would include honours students) is as follows:

The University will provide a limited amount of free downloads known as the flagfall quota. IT Services have proposed a quota of 25 megabytes download per semester for each student.

Students in special circumstances can apply to have their quota increased manually.

Students will then be charged 25-30 cents per megabyte (MB) download over this quota.

The University argues that this system is required to reduce “recreational” use of the internet. IT Services claims (without providing any evidence) that most internet use is recreational. The flagfall quota has been allocated to provide free internet use for educational purposes.

Compared to a number of other universities the quota for free internet use is very small. For example Wollongong University has a quota of 100MB from overseas sites or 550MB from Australian sites or a pro rata combination of both, and there is no quota for postgraduate research students.

The PGSA is worried, once again, that education, in this case access to the internet for study and research, is becoming too expensive for student budgets.

The PGSA would like to hear your reaction to this proposal and in particular how these restrictions on internet access will affect your study and research. In particular we would like your views on the size of the quota for free use and the costs of downloading material from the internet once this quota has been exceeded. We will then compile student responses as part of our response to the University. We will ensure that all responses remain anonymous.

We look forward to hearing from you.