Report of The Student Information Processing Board of The Massachusetts Institute of Technology for 1982-1992

1 Acknowledgments

The activities of the Student Information Processing Board have been aided by many members of the MIT community.

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2 Summary

This report summarizes the activities of the Student Information Processing Board (which will be referred to as the SIPB or the Board throughout the rest of this report) over the last ten years. The campus computer environment has changed a lot in the past 10 years, and the activities of the SIPB reflect this change.

2.1 Purpose of the SIPB

The primary function of the SIPB is to improve access to computational facilities for students and other members of the MIT community. We have worked towards this goal in many ways, including by supplying computer funding and consultation to the community, providing terminals in dormitories and other public places, running a high-quality printing service, and writing software and documentation. We are constantly looking for ways to provide better services to the community.

Although our purpose has remained the same, changes in the campus computer environment, especially the creation of Project Athena in 1983, have changed our major focus. Before 1983, we concentrated on funding Multics accounts for students. After Athena started supplying unlimited accounts to undergraduates, we shifted our focus to those users that Athena did not serve, such as graduate students. We also worked to improve the Athena environment, advocating or implementing changes that we felt were important. Now, with Athena giving all students access to high-powered workstations, raw computer time is no longer an issue. Our focus is now on providing computer services that improve the MIT computer environment. These range from providing access to Network News, a nationwide bulletin-board system, to maintaining the SIPB locker, a large collection of useful software.

As computers become less expensive and more powerful, more students will arrive at MIT owning their own personal computers. Currently the SIPB offers a few services to these students, such as a means of transferring files between Macintosh or IBM-PC floppies and machines on the campus network. In the future we hope to improve these services and identify ways of increasing the value of these machines to students.

3 Accounts

One of the major purposes of SIPB has been to fund applications for computer accounts on Multics and other computers. Over the past 10 years, the SIPB has processed many applications for computer accounts.

3.1 Multics Accounts

Before 1984 and the onset of Project Athena, the SIPB provided the primary access to computing for the MIT student community. In the early 1980's, we were processing 1300 applications per year, for 1000 individuals. Project Athena, after opening up the Student Center cluster, relieved much of this load by providing accounts to all undergraduates. This still left graduate students without general computer access, and we still had 650 active accounts in 1986.

The application process originally worked as follows. Any member of the MIT community could obtain funding from the SIPB by coming to our office and filling out a simple application. On this application, the applicant provided a brief description of her proposed project. Common projects included learning computer languages or systems, writing scientific or engineering applications programs, preparing term papers, resumes, and letters, and doing statistical analyses.

After the user had completed the application, a Board member tried to determine the most appropriate computer system and the estimated cost for the project. If the Board member who took the application decided that it clearly followed our funding policies, the application would be approved immediately. In this case, a computer account would be set up, and the applicant could usually begin working on his project the same day. Most applications were approved in this fashion.

Certain applications were not covered under our policies. Such applications would be deferred until the next weekly meeting when they could be brought to the attention of the full Board. Applications falling into certain categories (for example, applications from organizations) would be automatically deferred to a meeting. In addition, any application that brought the total allocation for a user in the current fiscal year over a certain limit had to be considered at a meeting.

One of the important projects in the 1982-1985 time frame was the automation of the application process. The paper forms created a lot of menial work for SIPB members, such as form filing and data entry to activate the accounts. By 1985, the forms were replaced by an online database. SIPB members could take applications online, typing users' answers directly into the database. This change made Multics account management much easier and less time-consuming.

3.2 MITVMA Accounts

Besides Multics accounts, the SIPB has provided a smaller number of MITVMA accounts to MIT students. The accounting system on MITVMA has several deficiencies that discourage our use of MITVMA. It does not allow us to set limits on individual accounts, nor does it have any mechanism to log users out after spending more money than available. This primitive account system and the arcane user interface of VM/CMS has meant that we provide VM accounts only for purposes that cannot be satisfied anywhere else. Typical reasons for MITVMA accounts have been direct BITNET access, using statistical packages or accessing numerical FORTRAN libraries unique to VM/CMS. With the introduction in 1992 of the Unix-BITNET gateway, we expect less demand for VM accounts.

3.3 Grduate Student Access to Athena

The demise of Multics in 1988 removed our primary resource for serving graduate students. Because of the limitations of MITVMA, we lobbied Project Athena to give computer access to graduate students. Due to limited resources, Project Athena could not handle the additional load, but we did get the right to provide a limited number of graduate student accounts on Athena. Between 1988 and Fall 1989, we sponsored 134 graduate student accounts on Project Athena before access was granted to all graduate students.

4 Computer Services

When Project Athena began to provide more computer access to students, a large part of the SIPB's chartered purpose started to evaporate. Although there have always been computer access gaps that were left unfilled, applications could no longer be the Board's primary focus. The SIPB started to concentrate on providing computer services, such as writing and supporting new software, handling new printers, or providing access to different computer networks. In some cases, these services have been successful enough to be officially adopted by Project Athena or Information Systems, leaving the SIPB "to push the envelope" of computer services.

4.1 Multics Services

Before Multics shut down in January 1988, the SIPB provided a few services to Multics users. Even though the SIPB no longer runs any of these services, many current SIPB services are similar to the original Multics services.

Spinwriter

The SIPB maintained a NEC5525 Spinwriter until late 1986, for letter quality output from Multics. The SIPB provided manpower to run the printer, allowing users access to the printer whenever the office was open. After the Xerox 9700 became operational, demand for the Spinwriter steadily decreased until 1986, when the SIPB donated the printer to its last major user.

Coop

The SIPB's Coop project on Multics was an arrangement between SIPB and Information Processing Services (IPS) User Accounts so that individual MIT community members could pay for their own computer time. Instead of setting up many small Multics projects, User Accounts allowed SIPB to administer the Coop project. Users would come into the SIPB office and set up or maintain an account by paying the SIPB by cash or check. SIPB would deposit this money, and write checks to User Accounts for project usage. Many students had Coop accounts for editing their theses, since we did not fund thesis work. Also, some student activities had Coop accounts so that they could use Multics to aid their record keeping and accounting.

Individual Coop accounts were like bank accounts; the user paid an initial amount when creating an account, and this balance was reduced by computer charges. When a user closed an account, he could collect his remaining balance. Because of account registration and disk usage charges, a number of Coop accounts went negative before SIPB got around to deleting them. These negative charges represented cash money, for which the SIPB was responsible. Fortunately, the surplus balances of Coop accounts when Multics shut down covered these losses. If all the Coop users had come back to collect their remaining balances, the SIPB would have faced an embarrassing shortfall. This episode showed that the SIPB needs to be very careful about providing services for cash money.

ECS

The Educational Calculator Service (ECS) had capabilities for solving numerical calculations similar to those of a powerful hand calculator. We provided this service without requiring applications, so anyone with access to a Multics terminal could use it.

4.2 Software

The SIPB maintains a sizeable amount of software for the Athena and MIT communities in the SIPB locker. Some of this software has been written by SIPB members, while other programs are public domain or equivalent software that has been ported and installed by SIPB members. Originally the small directory `/usr/unsupported/sipb` on Athena time-sharing systems, it is now a standard Athena locker available via attach. The SIPB locker has grown to 110 Megabytes of executable, documentation, and configuration files. It is provided both from the SIPB AFS cell and Athena AFS cell, supports 6 machine architectures, and is the most used locker on Athena machines.

X Utilities

The SIPB provides a number of X window utilities, most notably `xscreensaver`, which allows users to lock their screens while leaving their machines for a while. This program has been a source of controversy, since some Athena users in public clusters have locked their screens for more than the policy limit of 20 minutes, forcing other users to reboot the workstations to reclaim them. Users and consultants have complained about `xscreensaver`, saying that the program encourages users to violate the policy. At one point we installed a new xscreensaver that automatically logged the user out after 20 minutes, but this generated complaints from private workstation owners, and some users got around the limit by compiling their own versions of xscreensaver. We backed out the change, but a few years later implemented a compromise where a "logout" button pops up after 30 minutes, making it easy for a user to reclaim an idle workstation without rebooting. This controversy highlighted the diverse users of SIPB software, and the inability to restrict user behavior with software controls.

Other X utilities that SIPB provides are graphical appointment calendars, `xcal` and `xkal`, X versions of non-graphical utilities like `xzwrite`, `xfortune`, and `xalarm`, and amusing ways to use spare CPU time, such as `xneko` and `xfish`.

TeX/LaTeX

The SIPB was an early sponsor of TeX and LaTeX, a text formatting system ideal for formatting mathematical equations. Unlike Scribe, the text formatter originally supported by Athena, TeX and LaTeX are available free of charge, and more likely to be encountered by students after they leave MIT. Many academic journals now prefer TeX/LaTeX submissions.

The SIPB support of TeX and LaTeX has gone beyond simply providing the software in the SIPB locker. The SIPB has written user documentation, taught IAP classes on TeX and LaTeX and provided help to users with questions. We maintain the MIT redistribution of TeXhax, the electronic journal of the TeX Users' Group, and the TeXfonts locker.

Eventually, Project Athena switched from Scribe to LaTeX as the supported text processor. The SIPB still provides documentation and newer and more powerful versions of TeX and LaTeX than the standard Athena versions.

Webster

The SIPB provides an online dictionary. Users can look up words from their workstations, using a simple command-line program or an X utility. Although the dictionary is several years old, it still provides a useful service to users writing papers or arguing definitions online. We are currently looking at acquiring a newer version. SIPB has looked into providing an online thesaurus, but has not yet found a good package.

idraw & xfig

The SIPB provides `idraw` and `xfig`, two drawing packages. Both allow users to create simple diagrams for including into papers.

Japanese Language Software

Since early 1991, the SIPB has also made available to the user community a set of Japanese language-processing applications, including jTEX/LATEX, **`nemacs`** (a Japanese-capable version of emacs), **`kterm`** (Japanese xterm) and **`jserver`** (kana to kanji conversion utility). These programs have been widely used by students studying the language, as well as by international students and researchers at MIT.

archie & xarchie

The SIPB locker contains both **`archie`** and **`xarchie`**, programs that allow users to find files available via anonymous FTP. These programs query a remote database of file names and print out matching entries, making it easy to find software packages and other resources available on the Internet.

4.3 Printing

Another service that the SIPB has provided is giving users high-quality printer output. In addition to the Spinwriter service mentioned above, the SIPB has provided access to alternate laser printers for Athena users. The SIPB supported development of the gateway between Athena and the Xerox 9700. In 1986, the SIPB was one of the first organizations at MIT to get a PostScript printer, an Apple Laserwriter. This was available without charge to Athena users before Athena purchased PostScript printers in November 1987. The SIPB has also encouraged interest in the PostScript language itself, providing a publicly writable locker for interesting PostScript programs and teaching classes in PostScript.

4.4 Networks

The SIPB has provided gateways between the campus network and other types of networking. The original Charon, a VAX 11/750 donated to SIPB by Project Athena, was used as a gateway between the Chaosnet, an early campus networking technology, and the Athena network. For a few months in 1984, this served as Project Athena's only connection to the Internet; Charon would send the traffic to the Laboratory for Computer Science via Chaosnet. Even as late as 1990, users could send mail or transfer files to Chaosnet hosts through Charon.

A more recent gateway SIPB has provided is the Zephyr/BITNET gateway running on Charon (the name is now attached to a MicroVAX), which allows Athena users to communicate interactively with BITNET sites. Originally the SIPB planned to use the UREP software package from the Penn State university for running the BITNET software on a Unix machine, but switched to a Hebrew University of Jerusalem (HUJI) implementation that was available for no charge after running into licensing problems with Penn State. The service has been up and running for a few months, and is reducing the demand for SIPB VM accounts.

4.5 Electronic Communication

The SIPB has provided and supported three electronic communication packages – Network News, Discuss, and IRC – to improve electronic communications both externally and internally to MIT.

Usenet

Network News, also known as "netnews" or "Usenet", is a bulletin board shared among many computer systems around the world. Usenet is a logical network sitting on top of several physical networks, including UUCP, BITNET, and the Internet. Usenet sites include numerous universities, private companies, and research organizations. The number of Usenet sites and the traffic volume has grown tremendously over the past few years.

The SIPB provides Usenet access to Athena users. It runs three netnews servers, which receive and transmit articles with other Usenet sites. The servers currently store 565 megabytes of articles, and process around 11,000 articles (around 40 megabytes) per day. The SIPB servers are part of the "Usenet backbone", which are the sites that transmit most of the Usenet volume through the country. The SIPB MicroVAX named Bloom-Beacon also gateways a few Usenet groups with Internet mailing lists, such as the X window system mailing list `xpert`.

Two recent additions to the Netnews service are Clarinet and USA Today news, which are paid services delivered to a subset of the Usenet community. With funding from Information Systems, SIPB delivers UPI news flashes and syndicated columnists like Dave Barry and Miss Manners to the MIT community.

Discuss

The SIPB has also written and supports an electronic conferencing system called "Discuss" for use by the MIT community. Based on a similar system called Forum available on Multics, Discuss provides a set of electronic "meetings". While Usenet is for wide-spread communication among many network sites, Discuss is designed for a smaller number of users, who may have privacy concerns or long-term archival requirements. Discuss can restrict meetings to a given set of users, and retain discussion for a long period of time. Discuss is often used to save logs of mailing lists, or provide a forum for MIT-specific topics, such as the MIT Harassment policy (`harass` meeting) or proposed Student center art (`hairball` meeting).

The SIPB wrote the Discuss software from scratch. There are several client programs available, with terminal, emacs, and X interfaces. The SIPB provides disk space for over 100 Discuss meetings. There have been over 32,000 messages written to Discuss since 1986. Project Athena has included Discuss as part of the standard release.

IRC

The SIPB runs a server for Internet Relay Chat (IRC) for Athena users. This is an interactive broadcast system that connects users from different Internet sites. Users connect onto "Channels", which allows groups of users to send messages among each other.

4.6 Media Access

The SIPB provides a way for users to transfer files quickly from campus machines to different types of media, such as Macintosh and PC disks. Users can come to the SIPB office and use the SIPB Macintosh and PS/2 to perform file transfers over the campus network. The SIPB NeXT machine can also be used to store information on optical disks, although this service is not presently available because of problems with the machine.

4.7 Other Services

The SIPB provides a large number of minor services that are not provided elsewhere. Examples of these are servers for programs in the Athena games locker, disk space and computer access for useful projects. The SIPB supports FTP service for software distribution; some OS/2 utilities and UNIX microprocessor emulators are distributed from Charon.

5 Office

The SIPB office, W20-557, is the focal point of SIPB activity. It is staffed nearly 24 hours a day, providing a place for SIPB members to congregate and work. Users can walk in or call to ask questions, and SIPB business meetings are held in the office every Monday night at 7:30.

Since 1982 the SIPB office has moved twice, first from 39-200 to 11-205, and then from 11-205 to W20-557 right outside the Project Athena Student Center cluster. The move from 39-200 reduced the size of the office from 500 feet to about 280 square feet, while the move to W20-557 restored the space to 500 square feet. This helped ease the overcrowding of the Building 11 office, and allowed the office to hold more workstations and people.

The SIPB office's location outside the largest Athena cluster allows us to provide services directly to many users. The office has a library of reference manuals and books that users can read in the office. Users can come in and pick up documentation, use the SIPB's publicly accessible stapler to staple printouts, or ask questions, and members can help the users at their terminals if necessary. The new office location has increased our visibility and service to the Athena user community, to the point where users occasionally mistake us for Athena consultants.

6 Consulting

One of the important services that SIPB has always provided is answering users' questions. A user with a problem or a question, especially a technically difficult one, can visit or call the SIPB office and get an answer. SIPB members also provide help online, either through the `SIPB` and `Help` Zephyr instances, or as volunteer OLC consultants on Athena.

SIPB members are known for their wide range of expertise, due to the variety of machines and platforms to which the SIPB has access. Some members have access to special resources, such as interesting hardware, and can help with unusual requests. SIPB members do have a concentration of knowledge on software that SIPB members support or use heavily. Before Multics was shutdown, many SIPB members were very knowledgeable about Multics, and a good fraction of SIPB members were Multics online consultants. Now, with Project Athena as the main focus of undergraduate computing, the SIPB has many Unix hackers, with expertise in TeX, LaTeX, perl, and C. A smaller number of members are Macintosh or PC hackers.

7 Publications

The SIPB writes documentation which we supply at no cost to users. This documentation consists of either short introductory material, covering those features we feel are important, or guides to useful but less publicized features. We provide several documents, ranging from one to 50 pages in length, and we frequently revise these publications to follow a changing software environment.

We supplied two documents about Multics, *Notes on Using Multics* (NUMs) and *Notes on Editing Text* (NETs). NUMs was a brief introduction to Multics designed specifically for our users. NETs was an introduction to text editing on Multics, emphasizing the use of emacs and runoff. The document was a concise and easy to understand introduction to text editing on Multics. Our distribution of NUMs and NETs was partially funded by Finboard. Other Multics publications that we distributed were one-page runoff wallcharts, and policy statements of what SIPB sponsored accounts could be used for.

The SIPB now provides several documents describing the Athena environment and software that we support. One of the first Athena-related documents we produced was *The Inessential Guide to Athena*, which catalogs many of the less-publicized commands and capabilities of the Athena system. The "Inessential" name was a play on the Athena "Essential" documents. The Inessential Guide cover such topics as file protection, Emacs customization, RMAIL, and basic use of Zephyr, as well as introductory information for SIPB software like Discuss and Netnews.

The *Inessential* LaTeX guide provides a sufficient overview of LaTeX for users to generate most documents. It covers the minimum formatting commands and the commands needed to run LaTeX and preview and print LaTeX documents. It interprets the obscure error messages that LaTeX produces, and contains a handy reference to the special symbols that LaTeX supports.

The *Inessential AFS* guide contains an overview of the Andrew File System used on Project Athena. It describes the semantics of AFS file protections, quotas, and volumes, and describes the commands used to examine these objects.

Using Discuss is a user's guide to the Discuss system developed by SIPB. It describes the basic concepts of Discuss meetings and transactions, and explains how to access meetings using the terminal, emacs, and X interfaces. It also contains a list of interesting meetings available to MIT users.

SIPB has published a number of short one-page documents describing single topics. When we supported printing on the Laserwriter and Xerox 9700, we had one page guides for each. We produce *A One-Page Guide to the Usenet*, describing the basics of using Netnews, and *An Inessential Quick Reference to Athena*, which describes how to log in and out, and gives a list of useful commands and features.

8 Finances

During the early part of the reporting period, SIPB was assigned a budget split into three categories: operating expenses, capital expenditures, and telecommunications costs. The budget was assigned on a fiscal-year basis, ending on June 30 of each year. Operating expenses included costs for use of computers maintained by MIT's Information Processing Systems (IPS), and were always the largest component of this budget.

Approximate annual spending totals on computer time during the first few years were as follows:

1983	$170,000
1984	$260,000
1985	$340,000
1986	$88,000
1987	$100,000
1988	$20,000

Much less has been spent in subsequent years. The sudden dropoff in spending in 1986 was caused by the availability of no-cost Project Athena accounts to undergraduate students, ending the role of Multics as the primary student-computing platform.

In the years from 1982 to 1987, SIPB's largest expenditure was always for Multics usage. For example, over $30,000 was spent on Multics during February 1985. There was other computer-use spending during this time, particularly for VM/CMS and VMS (JCF) accounts.

Users logged into Multics on terminals, located either in computer rooms on campus, or at MIT living groups. In the latter case, the login involved a dialup connection. SIPB spent significant amounts of money (around $10,000 a year) on the hardware (e.g., terminals and modems) to support this computing infrastructure. SIPB also provided a printing facility for its user community, leading to expenses for printer purchases, as well as continuing costs for paper and other supplies. Finally, maintenance of some of this hardware was done by SIPB members, leading to costs for a SIPB toolbox and various small hardware items. Later, SIPB obtained service contracts from Digital Equipment Corporation on the terminals that had been purchased, adding additional periodic costs.

There were also ongoing costs for user documentation. The SIPB paid the duplication costs for thousands of copies of the Multics NETs and NUMs documents. A set of notes on the Lisp programming language was also developed by the SIPB; it proved extremely popular even outside MIT. Some later publications for Multics users described how to print using each of the available printers.

The SIPB also bought documentation for use in its office, e.g., the official Multics manuals published by Honeywell. The SIPB subscribed to a few popular computer-oriented magazines. Over this period we occassionally bought standard reference books for the office library, covering topics such as PostScript, TeX, LaTeX, C, and Fortran.

A VT-240A terminal for the SIPB office was purchased in April 1984, for $1600. In February 1985, the SIPB purchased its first Macintosh. In the summer of that year, a second personal computer, an IBM portable priced at $1500 was bought for the office. In October 1985, $4000 was spent on modems to provide dialup access to Athena timesharing systems.

An Apple LaserWriter printer was purchased in February 1986, for $4900. Significant continuing costs for toner cartridges began at this point. Also in 1986, the SIPB began developing and photocopying publications oriented toward the growing UNIX user community at MIT, beginning with an "Inessential Guide to Project Athena".

A Macintosh II system was purchased by the SIPB in March 1987, for $6800. In December 1987, some software-development tools for this machine were purchased. A network-interface card was added in February 1988.

A NeXT workstation was bought by the SIPB in January 1989. About this time, plans for moving the SIPB office to W20 (the Student Center) were being finalized. Spending of $35,300 for renovations to SIPB's new office space was approved in April 1989.

A refrigerator for the new SIPB office was bought in June 1989, for $480. This is used to hold soft drinks, and occasionally food, for consumption by SIPB members. Also, chairs and other furnishings were purchased at about this time.

The SIPB bought a mathematical software package, *SuperMongo* (*sm*), at a cost of $600 for an MIT-wide site license, in June 1990. In October 1990, an Amiga computer that had previously been owned by a Board member was purchased by SIPB for $450. Also during this month, a commercial Usenet feed was purchased from Clarinet Communications, for about $3000. This was an annual subscription cost, and was renewed a year later.

In February 1991, SIPB purchased a substantial hardware and software upgrade for its NeXT workstation at a cost of $2000. Also, in March 1991, the Macintosh II was upgraded by the addition of a $450 high-density floppy drive. In the summer of 1991, a new air-conditioning system was installed in the SIPB office, at a cost of about $9000.

In December 1991, a 1.2 Gb disk for SIPB's new news server (Bloom-Picayune) was purchased for approximately $2000. The memory in this server was then upgraded by 8 Mb, at a cost of $600. An Ethernet card for SIPB's IBM PS/2 workstation was obtained in January 1992 for $280. A 300 Mb disk for the NeXT workstation, to replace a failed disk, was purchased in February 1992, for $1600.

9 Terminals and Telecommunications

In addition to providing students with accounts on machines, part of the SIPB's mission has been to provide students the ability to connect to these machines.

Before Multics went away, SIPB maintained a collection of terminals in various living groups and in the Student Center Library. The Student Center library had seven display terminals and a medium speed printer. Four of the display terminals were hard-wired to Multics at 480 cps and three were on 120 cps dialups for access to other computers on campus.

Terminals and modems were rented to living groups for use in terminal rooms. The rent paid for service contracts on the equipment. In 1986, SIPB decided to sell the terminals and equipment to living groups that wanted them.

SIPB has loaned terminals to other student organizations that needed temporary computer access, such as the annual loan of terminals and modems to the R/O center for use with Clearinghouse.

10 Project Athena

The creation of Project Athena in 1983 fundamentally changed student access to computing, and SIPB has changed in response to it. Before Athena, SIPB was the major source of computer access for students, with SIPB-funded Multics accounts. After the opening of the Student Center cluster, students had general access to Project Athena, fulfilling a major function of the SIPB.

Although Athena brought a new vision and more funding to student computing, at times the SIPB felt there were gaps in what Athena was providing. In some cases we tried to convince Athena to provide more, and in other cases we used our resources to fill in the gaps ourselves.

10.1 Dialup Access

The original Athena model of computing did not include dialup access for students. Athena originally had a bank of dial-in modems for faculty and staff use, but none for students. In 1985 the SIPB donated 8 modems to Athena for general student use. These modems were used for access to the Student Center timesharing machines. In 1987, when Athena switched to the workstation model of computing, there were no provisions for dialup access. The SIPB allowed public dialup access to Charon, SIPB's timesharing machine, until Athena donated SIPB a Microvax as a dialup server. The SIPB ran the dialup service from 1987 until February 1990, maintaining two Microvaxes for general use. In February 1990, Athena installed a number of dialup servers, accessible via the new 5ESS phone switch.

10.2 Graduate Student Access

As mentioned above, graduate students were not originally given Athena accounts. The SIPB provided graduate students with Multics accounts, but this was no longer possible after Multics went away. SIPB asked for permission to give out 100 (later 200) graduate student accounts on Project Athena as a way of providing some graduate access without overwhelming Athena's resources. In Fall 1989, Athena opened up access to all graduate students.

10.3 Suggestions

To provide feedback to Project Athena, SIPB placed suggestion boxes in clusters asking for feedback. At certain intervals SIPB members would collect the suggestions in these boxes, and enter them online for Athena staff and SIPB members to read. The SIPB also set up mailing lists for online suggestions, one for normal suggestions and another by which suggestions could be submitted anonymously.

10.4 Other Feedback

There have been a number of other feedback mechanisms between the SIPB and Project Athena. In 1986, Project Athena formed a student liaison committee for soliciting feedback, and a few SIPB members joined this committee, although it is not clear if this committee accomplished anything., In 1990, the Student Committee on Educational Policy (SCEP), a part of the Undergraduate Association, held a meeting about Project Athena, which several SIPB members and Athena staff attended. Again, not much came from this meeting, except demonstrating the need for better communication between Project Athena and its users.

An effective way the SIPB has provided feedback to Project Athena has been through members who are Athena employees. Discussions in the office or various Chinese restaurants would sometimes result in a consensus opinion, which these members would convey to the appropriate Athena staff. For example, this happened in 1987 when many SIPB members had strong feelings against using the Remote Virtual Disk (RVD) protocol for user lockers. RVD had primitive sharing capabilities, and would have prevented users from sharing files. The SIPB provided resources for the testing of RFS, a public-domain remote file system that was an alternative to RVD. Although RFS was not the final choice for user lockers, the SIPB did encourage a look at other alternatives.

The large overlap of SIPB members and Athena student employees (watchmakers) has benefited both organizations, although it has caused concern among some members that the SIPB is too closely tied to Project Athena at the expense of other campus users.

11 Other Activities

Besides the services mentioned above, the SIPB has engaged in other activities to increase student interest in computing at MIT. The SIPB has taught a number of IAP courses on various subjects, and runs an annual tour of computer sites around MIT.

The IAP course topics that the SIPB has taught have varied over the years. In the early 1980's, the SIPB ran a popular LISP course, drawing 215 students in 1983. In 1984 we ran the LISP course, and a text processing course for Multics users. In 1985, 1986 and 1987, we have run a course on Unix internals, giving a low-level description on how UNIX works. In 1987 we ran a Multics internals course. In 1988 we ran PostScript, LaTeX and Emacs Lisp courses. In 1989 and 1990 we continued with the PostScript and LaTeX courses, and added a TeX and a popular C course. In 1991 we had classes on C++, GWM and Xlib, as well as the standard PostScript class. In 1992 we resumed the C course, and ran PostScript, Zephyr, Usenet, and Athena internals courses.

Each R/O week, the SIPB gives a tour of an interesting cross-section of MIT's computer facilities. The tour is designed to introduce freshmen to the variety of computer opportunities available at MIT. Many upperclassmen also take the tour, since we visit places students might otherwise never discover. At each of the sites, a representative presents demonstrations of the work done by that group, answers questions about the facility, and invites interested freshmen to come back later and apply for UROP or other work there. The Artificial Intelligence Lab, the Media Lab, an Athena cluster, and the Concourse Computer Center have been standard stops on these tours. Reactions to the tour have been very good – the freshmen appreciate the chance to find out where most of the computer on campus are and to see some of the research going on, and the on-site people are eager to show off their facilities and possibly attract new talent. Board members generally have a lot of fun guiding groups of freshmen to the facilities and talking with them about computing.

We have one other R/O activity: the recruiting of new members of the Board. As the SIPB is primarily a service organization, we look for people who are interested in helping to improve access to computers for the MIT community. No knowledge or familiarity with computer is necessary to become a SIPB member; just a willingness to help.

In June 1989, SIPB celebrated its 20th anniversary by having a small party in the Student Center. All known SIPB alumni were invited; 63 members attended along with their families. The alumni exchanged stories, visited the new office, and examined various memorabilia, such as the printout of the final login to MIT-Multics by a paying customer. The party was a chance for members to see old friends, and make new ones. A good time was had by all.

12 Membership

The SIPB is a group of undergraduates, graduate students, and other members of the MIT community sharing an interest in computer science and in community service. Not all members are computer scientists; some are involved in physics, math and a variety of other fields. SIPB members work in various labs and departments around campus, providing an informal network of contacts between independent groups of computer users.

The SIPB has two kinds of members: full and associate. A full member of the SIPB must be a student currently registered for courses at the Institute. All officers of the Board must be full members, and only full members may vote.

All members of the Board are expected to attend Board meetings and to contribute towards the activities of the Board on a regular basis. This includes staffing the SIPB office, participating in policy and design discussions, and helping out with the constant stream of jobs associated with providing services to the community.

Below is a list of the 152 SIPB members active during the 1982-1992 academic years, and their period of activity within the 1982-1992 time frame:

	1982		4		6		8		0		2
Harold Ancell	●	●	●	●	●	●	●				
Derek Atkins								●	●	●	●
Richard Barbalace											●
Michael Barrow								●	●	●	
Elisa Barzelay	●	●									
Richard Basch						●	●	●	●	●	●
Michael Bauer										●	●
Alan Bawden	●	●									
Don Becker		●	●	●							
Sharon Belville							●	●			
Jay Berkenbilt							●	●	●	●	
Pandora Berman	●	●									●
Jeff Bigler									●	●	●
Deborah Birnby										●	
Julie Bourne								●	●	●	●
Matt Braun										●	●
Chad Brown										●	●
Rich Carreiro										●	
Wes Carroll									●	●	●
Nancy Chang				●							
Weip Chen									●	●	
Chee Chew									●	●	●
David Cho									●	●	●
Shahid Choudhry				●	●	●	●	●			
Ike Chuang					●	●	●	●	●	●	
Calvin Clark										●	●
Dawn Clarke		●	●								
Andrew Cytron							●	●	●	●	●
André DeHon					●	●	●	●	●	●	●
Jean Diaz					●	●	●	●	●	●	
Klee Dienes								●	●	●	
Terry Donahue						●	●	●			
Ken Duda								●	●	●	●
Phil Earnhardt		●	●	●	●	●	●				
Mark Eichin						●	●	●	●	●	●
Carla Fermann		●	●	●	●	●	●				
George Fitzmaurice						●					
Charles Frankston	●	●	●	●	●						
Rob French					●	●	●	●	●		
Simson Garfinkel			●	●	●	●	●	●	●		
Len Giambrone										●	●
Nancy Gilman						●	●	●			
Bill Gimbel			●	●	●						
Christine Goddard									●	●	

	1982		4		6		8		0		2
Joe Goldstone	●	●									
Aaron Goodisman					●	●	●	●	●	●	
Matthew Gray											●
Andrew Greene						●	●	●	●	●	●
William Habeck		●	●	●	●						
Joe Harrington							●	●	●	●	
Lyman Hazelton	●	●									
Henry Holtzman				●	●	●					
Charlie Hornig	●	●									
Marc Horowitz							●	●	●	●	●
Tim Hyland				●	●	●	●				
Kevin Iga											●
Barry Jaspan								●	●	●	●
David Jedlinsky				●	●	●	●	●	●	●	
Cathy Jennings				●	●	●					
Patrick Jennings	●	●	●	●	●						
Linda Julien								●	●	●	●
Jon Kamens							●	●	●	●	●
Andy Karanicolas				●							
Erik Kay										●	●
Irene Kim		●	●	●	●	●	●				
John Kohl			●	●	●	●	●	●	●	●	
Aya Konishi			●	●	●	●					
Rick Kovalcik	●	●	●	●							
Robert Krawitz						●	●	●	●	●	
David Krikorian								●	●	●	
Raghu Krishnaiah				●							
Brian LaMacchia					●	●	●				
Richard Lai	●	●									
Rick Lawhorn	●	●									
Stephen LeBlanc	●	●									
Amy Lee		●	●	●	●						
Stephen Levine		●	●								
Bruce Lewis								●	●		
Sheung Li								●	●	●	
Vince Light				●							
Mark Lillibridge				●	●	●	●	●			
Sam Lippert											●
Spencer Love	●	●	●								
Ronald Mabbitt	●	●									
George Madrid									●	●	
Barbara Manganis											●
Barry Margolin	●	●	●								
Benson Margulies	●	●									

	1982		4		6		8		0		2
Charlie Marker	●	●	●	●							
Katherine Marvin	●	●									
Greg McMullan											●
Zigurd Mednieks	●	●	●								
Anand Mehta				●	●	●	●	●	●	●	●
Henry Mensch					●	●	●				
Jon Monsarrat						●					
Dinarte Morais	●	●	●								
Dan Morgan		●	●								
Jeannine Moseley	●	●									
Mark Nahabedian	●	●	●								
B. Cliff Neuman	●	●	●	●	●	●	●				
Julius Niewinowski		●	●								
Gary Palter	●	●									
Lisa Paradis								●	●	●	
Jay Pattin	●	●									
David Plummer	●	●									
Matt Power										●	●
Gill Pratt	●	●									
Chris Provenzano										●	●
Ken Raeburn				●	●	●	●	●	●	●	●
Jim Reich				●	●	●	●	●			
Brett Reid								●	●	●	
David Rho											●
Brad Rhodes									●	●	
Jon Rochlis	●	●	●	●	●	●	●	●	●	●	●
Paul Rosenblum	●	●	●								
Wendy Rowe	●	●									
Gail Sadlo				●							
William Saphir		●	●	●	●						
Jeff Schiller	●	●	●	●	●	●	●	●	●	●	●
Anthony Schinella						●					
Ed Schwalenberg	●	●									
Ruth Seltzer										●	●
Chris Shabsin											●
Arlene Shames							●				
Olin Siebert	●	●									
Tanya Sienko	●	●									
Carol Smith						●	●	●	●		
Carolyn Smith						●	●	●	●	●	●
David Smith				●							
Bill Sommerfeld				●	●	●	●	●	●	●	●
Ted T'so					●	●	●	●	●	●	●
Chris Tavares	●	●									

	1982		4		6		8		0		2
Lee Tavrow		●	●								
Chun The				●	●	●	●				
Jenifer Tidwell							●	●	●	●	
Howard Trachtman	●	●	●								
Donald Varona					●	●	●				
Mary Vogt						●	●	●			
Deborah Wallach					●	●	●	●	●		
Phillip Webster								●			
Allan Wechsler	●	●	●								
Robert Weiner		●	●								
Peter Weyhrauch				●	●	●	●				
Chip Whitcher			●								
David Williams								●	●	●	
Meilin Wong			●	●	●	●	●				
George Xixis				●	●						
Bill York	●	●									
Thomas Yu											●
Ramin Zabih	●	●	●	●							
Stan Zanarotti				●	●	●	●	●	●	●	●
Francis Zane									●	●	●
Livia Zien					●	●	●				