This document addresses the various sources of information that the political scientist can rely on and make use of via electronic mail. What network sources are available, where they can be found, what to do to get them, how to use them, and what sources to make use of in order to obtain maximum information are discussed. The article examines the question of how these network resources can be incorporated in various courses and how useful they can be to the individual faculty member who chooses to invest some time in learning about these resources. The paper focuses on some of the advantages and disadvantages of using electronic mail in specific courses. Its uses in courses like Women and Politics, Comparative Politics, Asian Government and Politics, Global Issues, and American National Government are described. Faculty members are discovering that information networks can be an effective means for communicating with their students as well as colleagues from other institutions. Electronic mail has been an effective venue for an institution's trilateral goals of trying to bring together computing, writing, and internationalizing the curriculum. The paper includes a section on student feedback on the use of Internet resources in several courses at the University of Wisconsin-La Crosse. Samples of responses to a survey are included. Those who enjoyed using electronic mail emphasized how they were able to use it to contact others and use the available resources for many courses. Those who objected were those who could not, or did not want to spend time in a computer laboratory. (DK)
USING INTERNETWORKING RESOURCES IN THE POLITICAL SCIENCE CLASSROOM

by
Cecilia G. Manrique, Ph.D.
Assistant Professor
Political Science
University of Wisconsin - La Crosse
La Crosse, WI 54601
(608) 785-6642
MANRIQUE@UWLAX.EDU
MANRIQUE@UWLAX.BITNET

"Prepared for delivery at the 1993 Annual Meeting of the American Political Science Association, the Washington Hilton, September 2-5, 1993. Copyright by the American Political Science Association."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced exactly as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
CECILIA G. MANRIQUE
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."
ABSTRACT

As information technology becomes more commonplace in higher education, faculty members in various fields find themselves relying on available network resources for valuable information in their areas of specialization. There is a wealth of information to be found in the networks for different fields of study. In this paper I would like to address the various sources of information which the political scientist can rely on and make use of via electronic mail. I will take a look at what network sources are available, where they can be found, what to do to get to them, how to use them, what sources to make use of in order to obtain maximum information. I will also address the question of how they can be incorporated in various courses and how useful they can be to the individual faculty member who chooses to invest some time in learning about these resources.
INTRODUCTION.

When BITNET was introduced into the University of Wisconsin - La Crosse campus five years ago, it got off on a slow start. People had to learn to use it. Documentation had to be developed. Training sessions had to be held. Now that BITNET, INTERNET and WISCONNET are available on campus, the main concern is how to bring whatever wonderful resources they possess into the various classrooms.

Aside from the usual uses that have been made of it in terms of internal communications, not too many faculty members have devised ways to incorporate it into their courses. Over the past year though, more and more faculty members are discovering that it can be an effective means for communicating with their students as well as colleagues from other institutions. It can also be a means of encouraging their students to increase and improve their writing skills without their actually being conscious of it. It can also be an effective means of getting students to communicate with their peers from other countries. Thus, electronic mail has been an effective venue for an institution's trilateral goals of trying to bring together computing, writing and internationalizing the curriculum (Manrique, 1990).

This paper takes a look at the various uses that political science faculty can have with electronic mail in fulfilling these goals. I will describe its uses in courses like American National Government, Global Issues, Women and Politics, Comparative Politics and Asian Government and Politics and the various area studies courses. The paper will focus on some of the advantages and disadvantages of using electronic mail in specific courses. With the help of student responses to end of the semester evaluation surveys, this paper will hopefully show where it has been quite successful in implementing institutional goals. It will also show some of the pitfalls that accompany such a non-traditional method of delivering education. I hope to be able to suggest ways to incorporate electronic mail in other courses through the various resources that are out there in "netland" in order to make the computing learning experience more exciting if only students and faculty members were aware of their existence. This means discussing LISTSERVS on BITNET, Telnetting into different campus libraries via the INTERNET and poking into resources such as the Dow Jones News Retrieval service and the Cleveland Freenet for USA Today headline news. With these resources on hand for faculty members, it is hoped that they can broaden their students' perspectives on various issues whatever their subject matter.

ON A MISSION POSSIBLE.

I have considered it my mission over the past four years to disseminate information on the wonders of the networks through various fora. One way of course is to engage in publication of book chapters and articles that highlight the various uses of the network. One of the most satisfying experiences of the past year has been to be part of an effort to produce a book entitled Computer Mediated Communication (CMC) and the On-Line Classroom currently being

1

4
published by Hampton Press and due to come out in three volumes by the end of the year. The book chapter I wrote which was co-authored with Harry Gardiner takes a look at "Computer Mediated Communications in Political Science and Psychology", (Manrique[h] and Gardiner, 1993) parts of which have served as inspiration for this submission to the APSA’s annual meeting. But the most unusual aspect of this publication is the fact that it was done entirely via electronic mail. The call for chapters last summer started out as a call in one of the LISTSERV lists that I belong to. I submitted an abstract which was one of 30 accepted out of 90 that were proposed. The editors of the list set up a LISTSERVER called CMCBOOK where chapter authors were automatically made a part of the list. All communications were made via that list regarding chapter guidelines, chapter deadlines, questions about format, questions about footnoting, sharing completed chapters for comment by peers. It was quite exciting to be working with people I have not met face to face before and to have completed this project as quickly as we have so that by the end of this summer the publisher would have the proofs ready for individual authors to approve.

The second way I have disseminated information about the network is through articles written for various journals and periodicals. Two of the more recent ones which have generated interest in the Political Science field are "Internetworking Resources for Political Scientists which came out in the December 1992 Issue of PS: Political Science and Politics and "Internetworking Resources for Wisconsin Political Scientists" which came out in the Spring 1993 issue of the Wisconsin Political Scientist. I have accumulated responses and questions about the use of electronic mail and listservers in my MAILER and I have been faithfully responding to those who have made inquiries of me with regards to the network, including a very recent one who has said he had been using it since it came out in PS. (A copy of one inquiry is attached as Appendix A)

A third manner of delivering this message about the value of the networks is by undertaking presentations in fora such as this. I was introduced to the power of conference presentations when I attended my first Special Interest Group for University and College Computing Services (SIGUCCS) in 1989 while working for Academic Computing. I saw the void in training and disseminating the use of network resources to faculty and used the opportunity to develop my own materials and papers in giving presentations about various network resources. Contacts at various University of Wisconsin system institutions made requests for me to come to their campuses and give lectures and workshops for their faculty in the many ways to incorporate network resources in their various fields of study. Thus, I have given presentations at UW-Eau Claire, UW-Stevens Point, UW-Oshkosh and UW-Madison and have even appeared in a system video presentation explaining the value of the network to the Board of Regents. Some of the more interesting titles of presentations are "A Multicultural Internet" and "Teaching with a Net", the last one generating a letter from the University of Wisconsin - Stout's director of International Programs and a Political Science faculty requesting for materials that could help him incorporate this in his International Relations course and in his work as Director of
International Programs. Of course, my own campus was the last to realize the value of such a resource. It has only been the last year and a half that I have been giving workshops to faculty in various departments gearing the resources to their own fields of specialization, i.e. business, psychology, women's studies, Asian American studies. And this summer I have even expanded to another venue for disseminating information out of the belief that starting them out young is the best way to get them. I have done a College for Kids session on Electronic Mail for Winona State University and the kids had a blast. Future presentations include one for the International Society for Technology in Education entitled "Taking an Electronic Carpet Ride: A Whole New World via Electronic Mail" to be done in Dallas, Texas in November 1993.

The abovementioned methods have provided a sense of satisfaction that the word is being circulated regarding the valuable resources that are out in the networks. However, that which gives the most satisfaction is the ability to use electronic mail and internetworking capabilities in my own political science classes as a means of reaching out to my students who find themselves rather restricted by the classroom situation. So we come into class, discuss things but what do we do with what we learn afterwards? Students have found it a valuable way of communicating their thoughts and ideas with me and with each other beyond the classroom. (Appendix B and C attached) This paper will describe how I have made it possible for my students in Asian Government and Politics, Global Issues, Comparative Politics, and Women and Politics and, in the future, my students in American Government and Middle Eastern Government and Politics to avail of external resources that have opened their eyes to a whole new world out there.

ALL THOSE NETS.

There many kinds of network available to the academic. Many states such as California, Minnesota, Illinois have statewide networks that interconnect the various campuses throughout the state. The state of Wisconsin has WiscNet which is a high-speed computer network that connects the University of Wisconsin System campuses and many of the private academic institutions in the state. The purpose of this interconnectedness is "to advance education, research and public service by assisting in the exchange of information among research and educational institutions by means of high-speed data communication techniques, and to assist those institutions in gaining access to scientific and educational resources" (Raleigh). Thus our WiscNet links in the state in turn links us to regional, national and international computer networks such as BITNET and the INTERNET.

BITNET is a network of mini or mainframe computers connecting many universities and colleges allowing for a mail store and forward capability. The INTERNET is also a collection of networks which makes use of the TCP/IP protocols for exchanging information. Depending on which one an institution is linked to, one can have access to various BITNET and INTERNET listservers.
LISTSERVERS are host computer centers which distribute electronic mail and files either by subscription or by single request. There are hundreds of listservers set up for all types of topics. A listserver can be a storehouse of information for various topics.

SO WHAT DO WE DO WITH ALL THOSE NETS?

The Asian Government and Politics Experience.

Learning about the wonderful world of networks out there can tend to be quite overwhelming as some of my students may have experienced the very first time I tried to introduce my "paperless" Asian Government and Politics course four years ago. It is interesting though how some of the student comments after four years about putting outlines and notes out in the network give voice to what I was trying to do then with little success. I have learned a lot of lessons since then just based on positive and negative feedback that my students have provided.

Instituting electronic mail communication on an international level has its positive effects and negative results. Students who completed the course had mixed experiences, from major success stories, e.g. continuing friendships with original contacts from other countries, to those who experienced frustration because they were unable to make any contacts at all using electronic mail. Thus, some were grateful for the experience because it was enriching for them and others were resentful because it presented them with a negative experience.

An instructor who tries to implement this, especially on an international level, must be made aware of possible frustration. Certain conditions will not be within the instructor's control such as the ability or willingness of individuals on the other side to respond to one's students. This initial experience, however, was valuable because it provided lessons to be learned for future implementation.

It should be recognized that many college students, unlike their elementary and secondary school counterparts, often get turned off by the mere thought of facing a computer. It helps when the instructor trying to introduce the computing component in the course is computer literate and is relaxed and confident about incorporating it in the curriculum (Manrique, 1990[b]). Thus, the instructor should make an effort to learn e-mail and not just throw the students to the computer center for help when they have problems.

That which I find most valuable about being part of "netland", and which I hope my students get to realize even if it is semesters after my class, is the fact that it allows them to connect to various resources all over the world. How do I show them the capabilities of the network? Early in the semester, usually two or three weeks into it, I hold a laboratory session to introduce electronic mail and the internet to the classes. Each person is provided with an account. I make available a distribution list for everyone so that from the outset they can send messages to each other. I provide them with
step-by-step instructions on what to do and what the capabilities of our system are (Manrique[1], "Quick and Dirty"). And during that session they are able to tap into libraries all over the country and all over the world by TELNETting to various sites that I list for them (Appendix D). Students find that "poking into the internet" is such a lot of fun. I also provide them with telnet addresses for USA Today headline news and the Dow Jones News Retrieval Service which students find very valuable in terms of information not only for my class but for their other classes as well (Appendix E). Depending on the course, I have asked students to correspond with students from other countries about political experiences so stories of "examination hell", "relationships", "Mt. Pinatubo's eruption" and others have been traded over the networks internationally.

It is best to get the students into the computer lab two or three weeks into the semester rather than during the first week because it becomes less threatening. In this way, students are not going to think the focus of the course is computing. After all, computing via electronic mail is merely a component of the course, a supplementary tool for learning. Students would better realize the value of what they were learning if they were eased into it, became immersed in it during the entire semester and discovered for themselves what a fun thing it is to engage in. Thus, the instructor will need to work on sustaining student interest throughout the semester and should not relegate the learning to just that one lab session. I have found it valuable to encourage students to use e-mail by providing extra credit to those who obtain the take home essay questions portion of the exam via electronic mail and those who choose to send in their responses via e-mail as well, for example.

It is also helpful to solicit support from our Academic Computing Services staff who may be more than willing to provide training and documentation for faculty. Having been once a member of the Academic Computing Services staff has helped me with the inside knowledge of the workings of our computer system. Some of the computer center documentation I had written myself and have therefore been able to gear them towards the needs of my courses and students. A written handout consisting of introductions to our VAX system, to electronic mail, a list of potential persons to contact, and telnet addresses to try are made available to the students. It helps to have a prepared list of contacts rather than ask students to look for contacts themselves. I have discovered that there are a lot of people in netland who are more than willing to help in efforts such as these as I had discovered recently when I made a call for help for people willing to correspond with my College for Kids participants. The kids were so excited about receiving mail from New Mexico, New York, California and even Australia.

Students were encouraged to send messages to me and to each other throughout the semester. My availability permitted students to get comfortable in using the facility. After they had proven themselves successful, and armed with the list of contacts, they were ready to venture into the world. Students were encouraged to send messages to several people assuring that at least one person would respond to them.
It was helpful to get students conferring on specific topics. For example, some of the topics covered in the Asia course were: various holiday celebrations, election procedures, and veneration of the emperor. One student was going through LSATs (Law School Admissions Test) at the time that she was corresponding with a girl from Japan. The Japanese girl named Naoko was also going through entrance examinations at that time and so the two of them discussed their own versions of "examination hell".

Thus, the facility has to be introduced through training and documentation, support has to be provided to the students who struggle through the learning process, some structure in their correspondences with each other also needs to be imposed to make all of this a worthwhile experience.

**USING THOSE LISTSERVERS.**

I have also found listservers to be valuable sources of information for my students. I have disseminated issues of the China News Digest to keep them posted about daily occurrences in China which they would never read about in the La Crosse Tribune. During the 1992 Presidential campaign I had appraised them of the status of the Clinton, Bush and Perot campaigns through information I had from network lists dedicated to these candidates. Those who wanted more detail on specific agenda issues and where a particular candidate stood were provided with such information. Group projects to hold a mock debate and mock election on campus certainly benefitted from information obtained from these listservers.

I have encouraged students to go to the network for information that may not be readily accessible from our own library. Thus, when the XVII Arrowhead Model UN was to be held on our campus, I had assigned my students to work in groups to represent a country. One of the groups had Greece and could not find much information from internal sources so I sent them out to the network to find information and they found a woman from Greece who provided them with what they needed.

What I usually try to do is to cull from one of these listservers (LISTSERV@BITNIC.BITNET) the topics that I think would be of interest to a specific field, in this case an Asian Government and Politics course:

<table>
<thead>
<tr>
<th>Net-wide ID</th>
<th>Full address</th>
<th>List title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJBS-L</td>
<td><a href="mailto:AJBS-L@LANCS.UVM">AJBS-L@LANCS.UVM</a></td>
<td>Association of Japanese Business Studies List</td>
</tr>
<tr>
<td>APNET-L</td>
<td><a href="mailto:APNET-L@JUINST.UOO">APNET-L@JUINST.UOO</a></td>
<td>Asia Pacific Network</td>
</tr>
<tr>
<td>BUDDHA-L</td>
<td>BUDDHA-L@LJUKYVM</td>
<td>Buddhism Discussion Group</td>
</tr>
<tr>
<td>BUDHIST</td>
<td>BUDHIST@PONTOKOK</td>
<td>Forum on Indian and Buddhist Studies</td>
</tr>
<tr>
<td>CHINA</td>
<td>CHINA@PUCC</td>
<td>Chinese Studies list</td>
</tr>
<tr>
<td>CHINA-HO</td>
<td>CHINA-HO@KENTVM</td>
<td>China News Digest (US News)</td>
</tr>
<tr>
<td>CHINA-NN</td>
<td>CHINA-NN@ASUACAD</td>
<td>China News Digest (Global News)</td>
</tr>
<tr>
<td>CHINA-NT</td>
<td>CHINA-NT@UGA</td>
<td>China Net (The Coordination Network for IFESS)</td>
</tr>
<tr>
<td>CHINANET</td>
<td>CHINANET@TAMVMI</td>
<td>CHINANET: Networking in China</td>
</tr>
<tr>
<td>CNC-L</td>
<td>CNC-L@JUVM</td>
<td>China News (Canada)</td>
</tr>
<tr>
<td>CND-EP</td>
<td>CND-EP@UVM</td>
<td>China News Digest - Europe/Pacific</td>
</tr>
</tbody>
</table>
As one can see from this short collection there are discussion lists for all kinds of topics. There are thousands more out there from various institutions that have put up their own listservers. In order to get a complete list of the one that can be found through the BITNET server send an electronic mail message addressed to: LISTSERVER@BITNIC.BITNET and in the body of the message type the following command: SEND LIST GLOBAL. Be prepared for a huge text file that would cover the latest listing of discussion groups available via this BITNET site.

In International Relations and Global Issues.

If one will note from the list a wide range of topics are covered by the networks. Some cover a broad area and general topics such as Women's Studies and the United Nations list. One can also subscribe to the AMNESTY and ECONOMY lists in order to...
find out what is going on in developing countries politically and economically. Some cover specific countries in Asia such as those that cover India, China, Pakistan and other parts of the world such as Russia, Canada, Chile. Others provide news services that keep one up to date with what is going on in each of these countries sometimes on a daily basis so that one can monitor news as it happens as in the example of a History Professor from the University of Wisconsin-Eau Claire who monitored the Soviet coup through a Baltic states list (Oberly). I often use the China News Digest to help me monitor what is going on in China and other countries in Asia and feed such news to my students in the Asian Government and Politics and Global Issues courses in order to get them interested in global issues and events [Manrique, 1991[a], p. 218].

In American National Government and Politics.

As previously mentioned, during the 1993 presidential campaign I obtained information about candidates' stands on issues from the BUSH, CLINTON and PEROT lists. Now that the campaign is over and the new administration is in place there are several interesting lists to belong to depending on the side of the fence one happens to be sitting on. For the "outs" a Republican list called REPUB-L has served as a venue for scrutinizing the administration's appointments and policies. There are even three lists dedicated to Rush Limbaugh, RUSH, RUSH-L and LIMBAUGH. For those who are "in" the administration, one of the vehicles for getting the message out to a large audience is through the networks. Thus we find efforts in all branches of government to make documents available to the public. The presidential branch of government makes available a few addresses to be used to make contact with the President and Vice-President of the United States. These are: PRESIDENT@WHITEHOUSE.GOV; VICE.PRESIDENT@WHITEHOUSE.GOV; and CLINTON-INFO@CAMPAIGN92.ORG. In order to get a summary of White House releases and schedules one can subscribe to a list that will automatically forward those summaries. Send a subscription to the address: ALMANAC@ESUSDA.GOV with the following message in the body of the text: SUBSCRIBE WH-SUMMARY. When I find any of the postings in these lists interesting and useful for students to know I circulate or forward a copy to members of my classes through my own internal distribution list. I then have students give me and each other feedback on the comments being made out on the network.

Several members of Congress including Representative Newt Gingrich are part of an experiment to get Congress on line as well so that our representatives are more in touch with their constituents (who know how to use the computer). The address to use to contact members of Congress is: CONGRESS@HR.HOUSE.GOV and with that one can keep in touch with the legislative branch of government.

The judicial branch of government is accessible via the networks as well. Supreme Court rulings in ASCII files are available at this FTP (file transfer protocol) site FTP.CWRU.EDU and a law network with judicial information and catalogs can be
found at the TELNET site: SPARC-1.LAW.COLUMBIA.EDU or by using the Internet Protocol (IP) address TELNET 128.59.176.78 in order to get in.

One of the lists that has provided me with valuable information from South East Asia is SEANET-L. It is a place one can go to for information. It is a place that provides information to such an extent that there was one time that the abstracts and proceedings of a conference on the Philippines held in Australia last summer was posted in that list in segments. What a wonderful way to keep up with current research about one's native country!

For Women and Politics.

Some lists like the Women's Studies list has been a useful resource for me especially in the preparation of a new course and one I have never taught before. The list provides a syllabi exchange service so that one can find out how others have structured introductory as well as more specialized courses in Women's Studies through the list. People go to the list for information about the best texts to use in Women's Studies courses. Conference listings have been helpful for professional growth and development. I have used such postings in the appropriate lists to make announcements about a National Asian American Conference we hosted at La Crosse and a call for participants to a Hunger and Debt Institute sponsored by Winona State University. I will once again use the services of the network to make a call for participants at a Curriculum Development Institute on Women and Issues of Development to be held in April 1994. Thus, the lists serve as a major avenue for disseminating information.

Calls for papers, collaborative writing efforts, and job openings are posted in the list as well. In fact, quite recently the Chronicle of Higher Education was brought into the network with the address CHRONICLE@MERIT.EDU and this service summarizes the major articles of the Chronicle as well as has the job openings listing that the paper copy carries.

When major issues are brought to the fore, such as when the Clarence Thomas - Anita Hill hearings were held and when the Rodney King trial and ensuing California riots took place, a discussion of the various points and issues took place among the subscribers to the lists like XCULT-L and WMST-L. Even discussions of the implications of movies like "The Crying Game" and books like "Backlash" are held in the list. The nomination of Joycelyn Elders for the Surgeon General position has been a recent item of discussion by list participants. The formation of a Toni Morrison Society was also a recent posting in the list. Thus, the lists serve as a fountain of information as well.

In general, in order to obtain access to any of these lists one needs to have access to one's institution's main computers and have an account with that computer. Then the individual will need to subscribe to the lists of interest to him/her. To subscribe to any of these lists one needs to send an electronic mail message to
LISTSERV@BITNIC.BITNET or the listserver that houses that discussion list that one is interested in, i.e. LISTSERV@UMDD.BITNET for the WMST-L. In the body of the message type in only the command SUB WMST-L (You can substitute the name of any list that you wish to join in this spot. I have chosen to use the Women's Studies list as an example.) Cecilia Manrique (and you substitute your first and last name here so that the listserver recognizes you as the subscriber). Thus, the full body of the text should read:

```
SUB WMST-L Cecilia Manrique
```

Some lists are more active than others so be prepared to either not receive too much mail traffic or be overwhelmed by a lot of messages which can average in the hundreds a day. If you find that a list gets to be overwhelming for you and some of the discussions are not to your advantage you can unsubscribe to the list by sending a message to the same listserver with the message: UNSUB WMST-L Cecilia Manrique and this should take you out of the list. Reading your mail conscientiously and screening them like you would ordinary junk mail would allow you to keep your account in order.

WHERE TO GO FOR HELP.

The network user's first recourse is usually to find the "experts" in the field who can point them to the use of their own system. Most institutions have computing centers and some may even have a department dedicated to academic computing, an arm of the center that services the needs of faculty who wish to incorporate computing in their courses. These members of the staff should be able to help one unravel the mysteries of the individual system they have in their institution in order to obtain the links to these various networks. Members of the staff should be able to point out to the faculty member what is possible or not possible within their given areas of specialization.

Once one gets into the network, one will find that there are a lot of friendly people out there who are more than willing to help a colleague in need of guidance. One of my first and foremost embarrassing experiences in the list was sending a subscription notice not to the listserver but to every member of the discussion group which was not my intention. A couple of messages were sent to me informing me of my folly. I learned my lesson and was not discouraged by it. I still belong to many lists. And I am still willing to learn.

Two valuable sources of information for me within the network come from: 1) Scott Yanoff who constantly updates existing TELNET and FTP sites and provides that information almost on a monthly basis through a posting in the network and 2) an academic listing of discussion groups relevant to political science by Diane Kovacs who has compiled this list from A (Anthropology) to Z (Zoology).
The ability to make use of what is on the network is limited only by one's imagination and one's willingness to explore. I have found this an effective way to draw my students out of learning merely from books which are often outdated into learning from what transpires around them. It allows them then to be more confident of critically taking a look at the reliability of sources that are fed to them through various media. As an exercise I let my students experience the various aspects of what is available on the network. This is done during one computer session I hold a few weeks into the semester. I help them in whatever way I can to make use of these resources not only in my course but in other courses as well. In fact I encourage them to constantly provide me with feedback about how they and I are doing during the course of the semester. For the most part students are awed by the new experience. Some take to it willingly especially when they have a positive experience with the computers and others fall by the wayside if they cannot get the system to function for them.

STUDENT FEEDBACK.

I have made it a point to obtain feedback from students regarding the use of internet resources in the course. A short survey is handed to them at the end of the semester in order to gauge their reaction to the activities that I have made them undertake. It is also my way of determining what works and what does not in order to tailor my activities for the following semester. (Survey instrument attached as APPENDIX F).

The results that will be used here are those of the spring semester 1993 for the courses POL 202 Global Issues and POL 205 Women and Politics. I have chosen to aggregate quantifiable responses although there seems to be a marked difference in the receptivity to the use of the internet resources between the two classes with the students in Global Issues taking more to it than those in Women and Politics.

When asked if they had used electronic mail at all after the initial exercise in class at the beginning of the semester, 59% answered in the affirmative and 41% said they did not. When asked why they went ahead and continued to use the facility the following responses were gathered: (samples of those responses have been reproduced here without much editing in order to preserve the authenticity of the responses)

- I enjoy using e mail. I checked headlines and sent mail messages.
- To communicate with others and to gather information.
- To talk to my mom in Madison and easier way of communication with others.
- Although I didn't use it often, it was nice to have when I needed for communication and knowledge/information purposes.
- Great way to communicate
- It was easy and I got to write back and forth to you and my friends!
- To send my computer programs to my c-s teacher.
- I had a management class which used E-mail a lot.
- Love it! Got an open channel that was fun- should tell class about it.
- To respond to a letter from Betsy, and to contact you over a certain matter.
- To write to a friend at MSU. I also wrote to a few people in class as well as looking at the ws. info on it.
I checked my mail every now and then. I didn't send any more messages. I guess I didn't have anything to say.

It was beneficial when I had a question or needed to relay a message to my UN group. It also helped me obtain extra credit points.

To check out the late scores of sporting events on the west coast that were not included in the morning papers.

To talk to my friends at other schools, and at this school, to get news off other sources, to do assignments on, and I started a bootleg-music trade between myself and Iowa city.

I used it to get extra credit for this test, and it is an easy way to talk to you (prof.)

I thought it was worthwhile. It was an easy way of communication and was free of interruptions. It was also fun to see what messages were sent to me.

Because it was fast, easy, and I liked to use it.

Yes. I found it particularly interesting and a neat way to confer with classmates and to keep up with the news from around the world.

To read wire services, sports info, daily news.

It was fun and it was an easy way to get messages to you or the class.

To transmit Model U.N. messages.

After the initial use, I was drawn to E-mail and its services. I also had a modem at home, making it much easier to use.

It was more convenient than trying to run someone down on the campus.

Very useful in research for this class and others also.

Those who responded that they did not use the electronic mail facility again had these things to say:

- I had a lot to do this semester with overlapping classes and working two jobs while taking 18 credits.
- Computers and I do not get along.
- No, because I really had no need to.
- I work too much, therefore I do not have enough time to spend in the lab.
- I really disliked using computers. It is basically a major pain for me to go into the computer lab. Computers give me ulcers!!!
- I did not use it because I am not good with computers, and therefore it was too time consuming for me.
- I prefer to speak face to face with my professors and friends whenever possible. I do think that it is a good idea to learn how to use electronic mail though.
- Because I saw no personal interest in it.
- I would have liked to correspond with a friend at another university, but he had to pay a fee to use the electronic mail.
- I didn't really have time with working 40 hours a week and trying to fit all my other mandatory homework in.
- Because I never used a computer at UW-L and I was totally confused. I would rather have a real lab and instructors because the idea of electronic mail is great! I just didn't understand it!
- Computers are not my love!
- I really had no need to use it outside of this class.
- Since he had some difficulty doing it I really didn't have time to sit and work on it. It would have taken too much time.
- With everything else going on going on in the semester I just didn't have time.
- I didn't have any reason where I needed to use it.
- Wasn't very interested in it.
- I didn't know we could continue to use it.
- I didn't have to for any of my classes.
- Honestly, I was lazy. The first time I used it, it was O.K., but I did not understand that well.
- I really never get over to the computer labs because I have a computer in my room.
- After the initial use, the need to use it never arose again.
- I didn't have anyone to correspond with. I guess I just didn't have the interest or time to become familiar with it enough to use on a regular basis.
- Because I never really had the opportunity or a reason for using the electronic mail.
- I guess I really didn't have a need to, but I'm sure I will in the future. It was beneficial to at least learn how to use it.
- Never really got the hang of it during the assignment. Never really needed to.
- Too time consuming.

Based on the above responses, clearly those who used it throughout the semester found value in corresponding with their classmates and with others over the net. They developed an appreciation for the value of resources that one could get from the net. Those who did not go beyond the first exercise admitted to
technophobia, laziness as well as not finding enough time for exploring the resources available to them.

Students were also asked how they used electronic mail. Responses ranged from those who used it to correspond with their other instructors not necessarily just me which was nice to hear because it reinforces the idea that this activity has linkages and impact in other courses within the institution. Some said they used it to correspond with their fellow students. Some indicated that they tried to contact friends in other institutions and I have helped a few armed with their friend's electronic mail address who have been frustrated because they forgot the IN% in the addressing scheme! Some tried to obtain information from other listserv lists after they were introduced to those resources.

Then the students were asked to comment on the use of electronic mail in the course. The open-ended question further wanted them to determine whether I could have used it more often in class without the students objecting to the use of those resources. Interesting comments that I obtained were the following:

- I thought the use of electronic mail was extremely helpful. During the beginning of the semester you introduced E-mail to us. It was informative. Then we had the option to work on E-mail individually for messages. I didn't mind using E-mail at all.
- I think the use of electronic mail was an excellent addition to this class. I used E-mail for many different things, and am glad to have been given the chance to use it. However, I feel it would be difficult to make everyone use it. I feel after the initial use with E-mail, one more assignment should be given. It was also great to encourage use by giving incentives like extra credit. Thanks for opening me up to this service.
- I think a lot of people are scared of computers, so I don't know if you shouldn't use it then or you should maybe use it more to get them over their fear. It's best for them to learn about computers.
- I really enjoyed using it. I communicated with my family quite frequently without having to deal with the postal mail. I'm glad you made us try it, otherwise I would have never known about it. Yes, I think you should have used it more frequently.
- In interest of saving paper, I believe you could probably use E-mail for the readings list and maybe assignments could be handed in to you on it. I think most people have time to stop at the lab to do these things. The only problem with E-mail is that some people have a hard time using computers because they aren't familiar. I think in this day and age, this will have to be overcome at one point or another anyway. After I got past the first encounter, I enjoyed using the E-mail system.
- This may sound like a complaint, maybe it is, but since I have been back at school many instructors assume everyone is proficient on the computer and give directions accordingly. Adding to this, when you are in the lab and the lab assistants don't understand it really makes it frustrating. I think everything should be user friendly. If this means what I think it does. Students not familiar with computers, need instruction that is more basic, not as though it is assumed they know. It really scares them away from getting into computers. It sure did with me. But I do want to learn and I will.
- Even though I did not use electronic mail after the initial exercise I found it interesting because it was something new and anything that introduces something new to the class is good. You could have used it more frequently. I'm sure without objections.
- I thought it was used well. I wouldn't have objected to using it more because I found it easier to communicate with that system than even the telephone. The good points were the variety of sources and information you could obtain, the ease you could do it with, and still be able to print. The bad points were you had to get to a lab to use it and printouts only came out in Wing! Overall I liked it and will continue to use it.
- I liked the idea of using electronic mail in this course. I feel we could have used it a little more without objection, because it was easy to learn and it was an easy way to send your messages. The good points of E-mail are that it is easy to use, you can get into other libraries, and find out news and other things. Also, it is an easy way to send messages to you and the whole class. The only bad points of using email would be that you may not always be able to get in to other things at times, such as the Dow Jones retrieval service. Also, the computer labs are not open really late, therefore if I wanted to send a message, I would not be able to until its open.
- I feel the use of E-mail was plenty useful in communication and continuing education. The only bad point I can figure out is the lack of computers on campus, and the terrible hours they have for lab time.
- I think you could have used it more with little rejection from the class. It seems scary at first, but becomes a great asset once one learns how to use it. I dealt with it last year and had a tough time getting a handle on it, but after a year of playing on it I rather enjoy it; I almost prefer it.
It is wonderful, I wish I would have been introduced to it earlier in my schooling. The only bad point I can think of is the availability and time element. It meant an extra trip for me and sometimes the computers were full.

I, personally enjoyed the E-mail exercise and the subsequent use of E-mail for the UN project and other class work. I think that making E-mail an option was the best way to go. That way those who were comfortable with the computers could use it and others could stick with traditional methods of communication. By offering extra points, you inspired some people to further their use of E-mail. I think using E-mail is a fast, efficient, direct mode of correspondence in a hectic world. My only problem was that I could not always get to the lab on a regular basis to use it and it would only print in Wing which was more inconvenient.

I believe what you did was fine. You started the ball rolling and then let it up to the individual to keep using it if they wanted to. During the semester you had some extra credit exercises if the student wanted to use E-mail. I think electronic mail is a good thing and is something you should continue to use in the future.

E-mail is great. Students would appreciate it more if they used it more frequently and became more comfortable with it. I had a lot of fun corresponding with a number of my friends in management classes that used E-mail.

Introduction to electronic mail was very beneficial; however, I think electronic mail could have been used more frequently than what it was. As an instructor what you say goes; so whatever assignments you give those students who care will complete them and those who don't won't. Using electronic mail wasn't that difficult, actually it was rather simple, if you are afraid students won't respond to e-mail assignments, make electronic mail exercises an option for extra credit, or even replacement assignments for the book review. Overall, electronic mail provided an easy and dependable way to communicate on campus; student-to-student, student-to-instructor, and vice-versa. Electronic mail even provided me with the ability to write my best friend at Michigan Tech University in Houghton, Michigan (only I didn't know she had an e-mail address). The only disadvantage, if it can be considered one, is getting to a computer, but since there are labs on campus with various hours, it shouldn't be a problem.

I wouldn't have objected to it (even though those computers hate me). It's cool and I'm sure more convenient for you, but it is kind of a hassle for me when I have to gain access to a computer (especially if they're busy) and then have to figure out how to use it or make it work if something goes wrong. I would like to use it next year and become more acquainted with it as I'm sure it could be a valuable asset.

I think you could have used it more because it's a very useful way to communicate with others without wasting paper. It also helps people feel more at ease with computers which is valuable in today's society.

Should have put outlines on E-mail - not waste paper and make students work a little harder to obtain study sheets for own good.

The extreme amount of material sent to us by you through electronic mail was nice, but perhaps a bit much.

Electronic mail is good for this course. If it required more, more people would get used to using electronic mail it would become second nature. The good points are that one can communicate with a professor that you have a hard time getting a hold of. And you can write to fellow students that you are working with. Bad points might be that you can get junk mail in electronic mail.

Those who enjoyed using electronic mail gave positive feedback about how they were able to use it to contact others, to use the resources that were available out there not only for my course but for other courses as well.

Those who objected to the use of the computers were those who could not, did not want, to spend time in the computer lab to obtain access. Complaints of inadequate machines and inadequate hours to be able to do their work were heard.

The success of this activity is reflected in the fact that many students made a request to have their accounts retained for the next semester. Others had indicated that they could not continue correspondence because they were graduating. Some wished they had computers at home so that they could still access the facility from their homes ever if they were no longer in school. Others were just reluctant to keep their accounts because they did not know what they would be doing over the summer period.

Students are asked to provide me with feedback and for the most part if the students open themselves up to the experience it
becomes a positive one for them, hopefully one that they can bring along with them to other courses and into the work place. In that sense I see the network as a means of improving my teaching and rapport with my students, it allows for the dissemination and hopefully creation of new ideas within academia, it provides the students with equitable access to electronic information which will allow them to be competitive in the workplace. Thus, I make my contributions in the transfer of technology to young minds that will be responsible for future public policy in this country.

WHERE CAN WE GO FROM HERE?

The answer to that question is certainly anywhere and everywhere. What the networks offer is limitless, limited only by our inability to tap into what is available. An introduction to the networks has hopefully broadened my students' horizons. The diversity of the groups represented in the list shows fertile areas for students to engage themselves in.

Most will not expect to do computing in a Political Science course. They may argue that computing has no place in such a course and will need to be gradually eased into the acceptance of technology in courses outside of computer science. Tolerance for computers will depend on students' past experiences with computing - good or bad. Students often realize the value of computer technology only after leaving the hated class that required them to do writing and communicating by means of a computer.

To overcome some of these difficulties, a good strategy to take is to make this a fun learning, non-threatening, experience for students. Computer activities should not be forced upon students on the first class day but presented as a useful exercise which they can choose to engage in if they desire to do so. A few class periods may need to be devoted to helping students unravel some of the basic features of using the system available to them.

At the same time, faculty members should exude a level of confidence that will allow students to see the same values that instructors wish to impart concerning the use of computers and electronic mail. It helps if a faculty member can answer most, if not all, students' questions so they do not need to be sent to the computing "gurus" in the computer center who may not be sympathetic to what students and faculty members want to accomplish. Maintaining an amiable, professional, working relationship with the computing services staff is always beneficial to all parties involved, especially when technical problems, beyond the instructor's capacity, arise.

Faculty should also be prepared with a list of potential contacts with whom students can immediately communicate. Nothing is more frustrating than to have to "look around" in the network for someone who will be willing to spend time communicating with your students. It is a commitment and for those that take that commitment seriously, they will have a good experience. Those who get someone who will communicate spottily is likely to be
frustrated. Much of this will be beyond the control of an instructor but the various parties involved need to be aware of this.

To encourage students to make regular and extensive use of electronic mail, an instructor can do the following:

* Send students a feed of news digests found on the network. For an Asian Government and Politics course, the China News Digest is a good choice.
* Have students join active discussion lists. For a Global Issues or International Relations course, subscription to XCULT-L, PACIFIC-L, and others specific to areas covered might be useful. For an American National Government course, subscription to the White House summaries might be interesting. For a Women and Politics course, the WMST-L is certainly recommended.
* Have students communicate regularly with the instructor on a variety of topics so that they use their mailing skills. If they don't, they easily lose them. They can also be encouraged to communicate with each other in this manner.
* If the instructor wishes the students to engage in active communication with other students from various countries and areas of the world, a lengthy list of BITNET pals from which to select names should be prepared. A two or three to one ratio is suggested so that the likelihood of finding an e-mailing partner is higher.
* The instructor should have a list of issues that students can discuss with their BITPALS so that there is a constant flow of information.

There are a lot of resources out there for the instructor and for the student that are just waiting to be tapped. As indicated by this paper, my professional growth has been enhanced by the information that I have obtained from the networks, from the call for papers for a book chapter or for a conference to the exchange of syllabi and classroom strategy in a particular course. For my students it has been a source of diversion from the usual "chalk and talk" in the classroom. It has helped reinforce their learning and has encouraged them to think of the issues outside of the hour or so they spend in the classroom thus engaging them in active learning. One just has to venture into the unknown and to be willing to learn from every positive and negative experience that comes along.

If I can be of any help to you as you venture into this experience send me a mail message at:

MANRIQUE@UWLAX.EDU or MANRIQUE@UWLAX.BITNET
References and Notes


"Internet Bibliography", Syllabus, March/April 1993, Number 27, p.20.


Manrique[e], Cecilia. "Internetworking Resources for Wisconsin Political Scientists", Wisconsin Political Scientist, Spring 1993, pp. 18-21.

Manrique[f], Cecilia, "Quick and Dirty Computing for Political Science Students", class handout modified every semester to incorporate new lists and telnet cites relevant to political science. For a copy, contact the author at address, phone number or e-mail address above.


Walquist, Chris. "Internetworking and Using Internet", NCSA Data Link, July-August 1990, pp. 13-21. This is extremely useful because of references to two classics in the literature: Doug
Comer's Internetworking with TCP/IP and Ed Krol's "Hitchhiker's Guide to the Internet".


Yanoff, Scott. (July 2, 1993). Updated Internet Services List. YANOFF@CSD4.CSD.UWM.EDU.
APPENDIX A

(Works from mail messages are reproduced as they were received and their use in this paper have been approved by the individuals quoted.)

From: IN"ALLAN@cgeuge51.BitNet" 15-FEB-1993 10:39:02.01
To: manrique@UWLAX.BITNET
CC:
Subj: Your article in PS Dec. '92

Dear Ms. Manrique:

Your recent piece in PS on Network resources is very interesting. Would you mind if we published a photocopy of it in the quarterly bulletin of the Swiss political association (of which I'm the current president.); Hopefully, PS would agree, too. What do you think?

Thank you for your kind consideration of this request,

Sincerely,

Pierre Allan
University of Geneva, Switzerland
Dear Class,

We have a gross misunderstanding. I'm painted daily in class as chauvinistic and apathetic. This is false. I'm just a humble conservative gasping for air while suffocating in this liberally-dominated class. The "bleeding heart" factor in POL 205 goes off the scale--and I accept it, while at the same time feel compelled to juxtapose the rhetoric I hear--if only to keep the supposed mindset of the class in check. Understand, it is a dark age to admit--much express--a conservative viewpoint, and I implore, if not demand the daily lynchings I endure cease--out of fairness and productivity to the class. There are those out there in the class who feel exactly as I do: learning about feminism in mildly beneficial, but cramming its mere existence down everyone's throat with the classic "saber rattling" being done in this class as it is elsewhere is ridiculous. The difference between myself and those who subscribe to my views is this: they sit there muted and neutered; I express my politics regardless of the situational challenge.

Timothy J. Meier
Hello my fellow classmates,

This is Kari speaking, yes the girl in the back row sitting next to the ever present Steve. As for this assignment I too had a few difficulties, namely there were two different filees in my name.

Anyway, Becky, these new computers are more advanced thus work faster than any you or I have see (Dan told me that) - Betsy, hope your valentine weekend wasn't that bad - Sherry, GREAT spelling of the word mayhem - Erick, your such a poet - Tony, your so damn positive, are you the guy in the back row by me - Tara, two messages and I'm frustrated too, but in a good way - Hollen, Leitsk, Uphill, Martha, Chuck, and Pam, I'm real proud that you did the assignment - Kingsu, computers aren't that horrible - lastly Tim, buddy if I as in a classroom setting and part of the discussion it is my responsibility to defend or justify the words I share. Hope that didn't sound PATRINIZING, it wasn't ment to be, but if you can't take the heat...

This E-mail is a great thing. I hope we continue to send messages to each other. If any of you would like to send me a personalized message my username is PREUSSPO205. By the was Manrique can show you how to contact other schools through E-mail, which would be alot cheaper than calling you friends.

Sorry so long! Kari
ACCESSING REMOTE LIBRARY CATALOGS AND DATABASES.

TELNET is a type of program which gives the user the ability to establish a connection with a remote computer connected to the INTERNET. One can access other computers using TELNET from the $ prompt of a VAX computer account. TELNET makes remote login possible by typing in the Telnet command together with the remote computer's address from the $ prompt. Once the user gets into the remote computer each site will have a set of commands and procedures to follow. Trying them and experimenting with them is the only way to learn. Here are a few addresses of services and libraries to try:

1. You can get into a service from the Cleveland Freenet which shows you the headline news in USA TODAY. In order to do that follow these instructions:
   a. Type in TELNET 129.22.8.38.
   b. Log in as a visitor which is choice 2 in the first screen.
   c. Choose to explore the system which is option #2 in the next screen.
   d. Just press the RETURN key until you get a series of menu choices in front of you. From that menu you can choose #15 or you can choose to type in GO USA. This will take you to the USA TODAY menu.
   e. Within the news service, look at the bottom of the screen for the various commands to use. Pressing the SPACEBAR usually allows you to page through the news. Pressing the letter Q allows you to quit and using the letter H will provide help.
   f. When done reading the news, in order to exit the service type Q to quit.

2. A library you can explore is the Marquette University Library which holds quite a collection. In order to gain access use the following command from the $ prompt:

   TELNET 134.48.20.1

At the login prompt type in the letter M. When asked for the terminal type just type in V and press the ENTER key to confirm. You can undertake a word search by typing in W and the subject Asian American. The search will bring up the various documents in their collection which has the term Asian American in the title. You can browse through the list or take a look at each of the descriptions for the documents. When done you can initiate a new search by typing in the letter N. This will bring you to the main menu from which you can choose to do another search or choose to quit by typing in the letter Q.
3. A few other library addresses to try are the following:
   University of Wisconsin - Madison 128.104.198.20
   University of Michigan 35.1.48.149
   Boston University 128.197.130.200
   University of Delaware 128.175.13.6
   Dartmouth University 129.170.16.11

4. Other libraries which you can try using their domain names are:
   Cornell University CORNELL.CIT.CORNELL.EDU
   Library of Congress DRA.COM OR LOCIS.LOC.GOV
   University of California MELVYL.UCOP.EDU
   University of Minnesota LUMINA.LIB.UMN.EDU
   University of Notre Dame IRISHMVS.CC.ND.EDU
   University of Pennsylvania PENN.LIB.UPENN.EDU
   Princeton University PUCABLE.PRINCETON.EDU
APPENDIX E

From: VAXA::GRANRAPO2051 5-FEB-1993 16:10:51.74
To: MANRIQUE
CC:
Subj: BECKI GRANRATH

PROFESSOR MANRIQUE,

THE COMPUTER ASSIGNMENT WAS VERY ENLIGHTENING. I'M GLAD YOU TOOK THE TIME TO WRITE OUT THE INSTRUCTIONS FOR THE COMPUTER OPTIONS YOU DID. MANY OF MY PAST PROFESSORS TALKED ABOUT SUCH OPTIONS AS E-MAIL AND THE DOW JONES REPORT, BUT NEVER TOOK THE TIME TO EXPLAIN HOW ONE WOULD GO ABOUT USING THEM. THE INSTRUCTIONS YOU GAVE US WORKED VERY WELL. EVEN THE MOST COMPUTER ILLITERATE PERSON, LIKE ME, COULD HAVE FOLLOWED THEM WITH EASE.

GAINING ENTRANCE INTO THE MURPHY LIBRARY, MARQUETTE UNIVERSITY LIBRARY, AND BOSTON UNIVERSITY LIBRARY WAS SIMPLE ENOUGH. I DIDN'T HAVE ANY PROBLEMS WITH THE ELECTRONIC MAIL EXCEPT, DO THE MESSAGES DISAPPEAR AFTER YOU READ THEM? I STARTED OUT WITH 14 AND NOW I ONLY HAVE 4 LEFT. WE DIDN'T NEED TO KEEP ALL OF THEM DID WE?

I DIDN'T GET INTO THE USA TODAY, BUT I WILL GO BACK AND TRY THAT AFTER I'M DONE WITH THIS MESSAGE. IN USING THE DOW JONES NEWS REPORT I TAPPED INTO THE SERVICES OF GENERAL NEWS, MOVIES, AND BOOKS.

ONCE AGAIN YOU CAME UP WITH A GREAT AND USEFUL ASSIGNMENT. THE INFORMATION YOU PROVIDE YOUR CLASSES GO BEYOND THE CLASSROOM AND THAT IS MORE THAN I CAN SAY FOR SOME OF MY OTHER INSTRUCTORS AND CLASSES. WITH THAT, THE ONLY THING I HAVE LEFT TO SAY IS THAT I'M GOING TO NEW YORK WITH MODEL U.N. YEAH!!!!!!!!!!!

BECKI
APPENDIX F

SURVEY INSTRUMENT

Please answer the following questions on the use of electronic mail:

1. Did you use electronic mail at all after the initial exercise in class at the beginning of the semester?
   _____ yes  _____ no

2. Why or why not?

3. If you answered no, you may stop answering this portion. If you answered yes, please answer the next question.
   a. How did you use electronic mail? Check all that apply.
      _____ to correspond with my instructor
      _____ to correspond with my classmates
      _____ to correspond with friends outside of the institution
      _____ to obtain information from various listserver lists
      _____ other, please specify __________________________
   b. Would you like to keep your electronic mail address?
      _____ yes  _____ no
   c. If you answered yes above, make sure you give me your username or have your name on this exam so I know whose username to keep.
      USERNAME ______________________

4. Comment on the use of electronic mail for this course. Could I have used it more frequently without objection from the class? Weigh the good points and the bad points about using electronic mail.