Pioneers of Online Learning in Alberta

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Steve Swettenham

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A micro memoir of my days on the bleeding edge of online learning . . .

convergence of Internet and distance education.

SciTech BBS

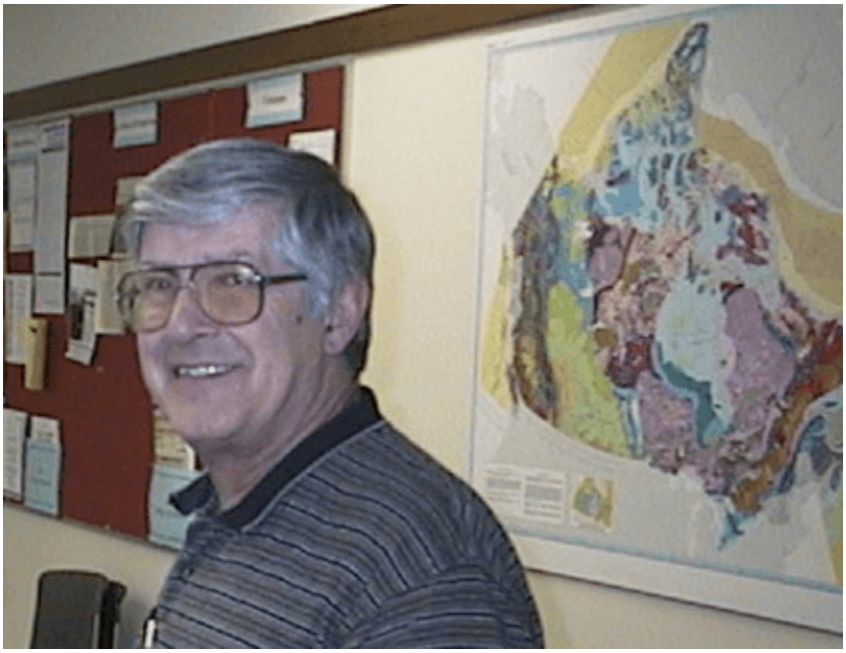
Download this book

Contents

Acknowledgements

My micro memoir is dedicated to Dennis Leask, and posthumously to Ray Sloan and Bruce Horrey, who dared to go where no Canadian educational system had gone before in 1993 online distance education at a college in Alberta.

Ray Sloan, Instructor, Mount Royal College, at home and online with first generation SciTech BBS



Bruce Horrey, Labstores Manager, Mount Royal College

I would also like to dedicated this micro memoir to the SciTech BBS students and global academic community who had the opportunity to make history and have fun learning on the digital highway.

Parts of this micro memoir have been reconstituted from my blog entries (June 2019) on The Landing at Athabasca University.

Revisions

Version 3.7 (2021-04-09)

- Modifications and inserted new content to Accomplishments page

Version 3.6 (2021-04-07)

- Date corrections and citation for NECC'94 conference presentation on Accomplishments page

Version 3.5 (2020-12-07)

- Modified and appended content in Back Matter on Epilog

Version 3 (2020-12-02)

- Modified text in Backstory Accomplishments and Back Matter Epilog
- Added Backstory presentation on 1996 BBS History in Accomplishments

Version 2 (2020-11-27)

- Inserted e-mail community outreach example to Internet Educational BBS Pioneers of Alberta – Part 3
- Added Backstory chapters – SciTech Email Archive and SciTech BBS International Teleconference

Little Known Facts

LKF's, an abbreviation for *Little Known Facts*, was used frequently by Ray Sloan and Dennis Leask.

Internet Educational BBS Pioneers of Alberta - Part 1

Introduction

This micro memoir of the SciTech BBS is organized into five parts. The front matter is followed by a four part chronological narrative of Internet Educational BBS Pioneers of Alberta with some content originally published from the Athabasca University Landing personal blog of Steve Swettenham between June 28, 2019 and February 13, 2020. Additional evidence has been reproduced from digital archives found by Dennis Leask. The third part is backstory which has been reconstituted from a *1998 Webolution* CD-ROM to an open e-book format. The forth part is the news reports about the SciTech BBS in education, followed by the back matter.

Although this open e-book may appear to be digital archaeological exercise, my compilation of recollections and evidence on the existence of the SciTech BBS was motivated by a comment from a distance education professor that Canada did not have online distance education in the early 1990's. Such a fallacy that may have permeated Canadian history of distance education, is what this open e-book will remedy with chronological evidence for online learning beginning in 1993 at Mount Royal College.

The SciTech BBS

Once upon a time in Canada, leadership and innovation existed within a digital frontier for online distance education in Alberta called the SciTech BBS – circa 1993 (also known as the SciTech ISP – circa 1994 – 1999). "BBS" is the acronym for Bulletin Board System (further information can be found

at http://www.bbscorner.com/usersinfo/bbsintro.htm and https://en.wikipedia.org/wiki/Bulletin_board_system).

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://on-linelearning.ca/imem/?p=124#video-124-1

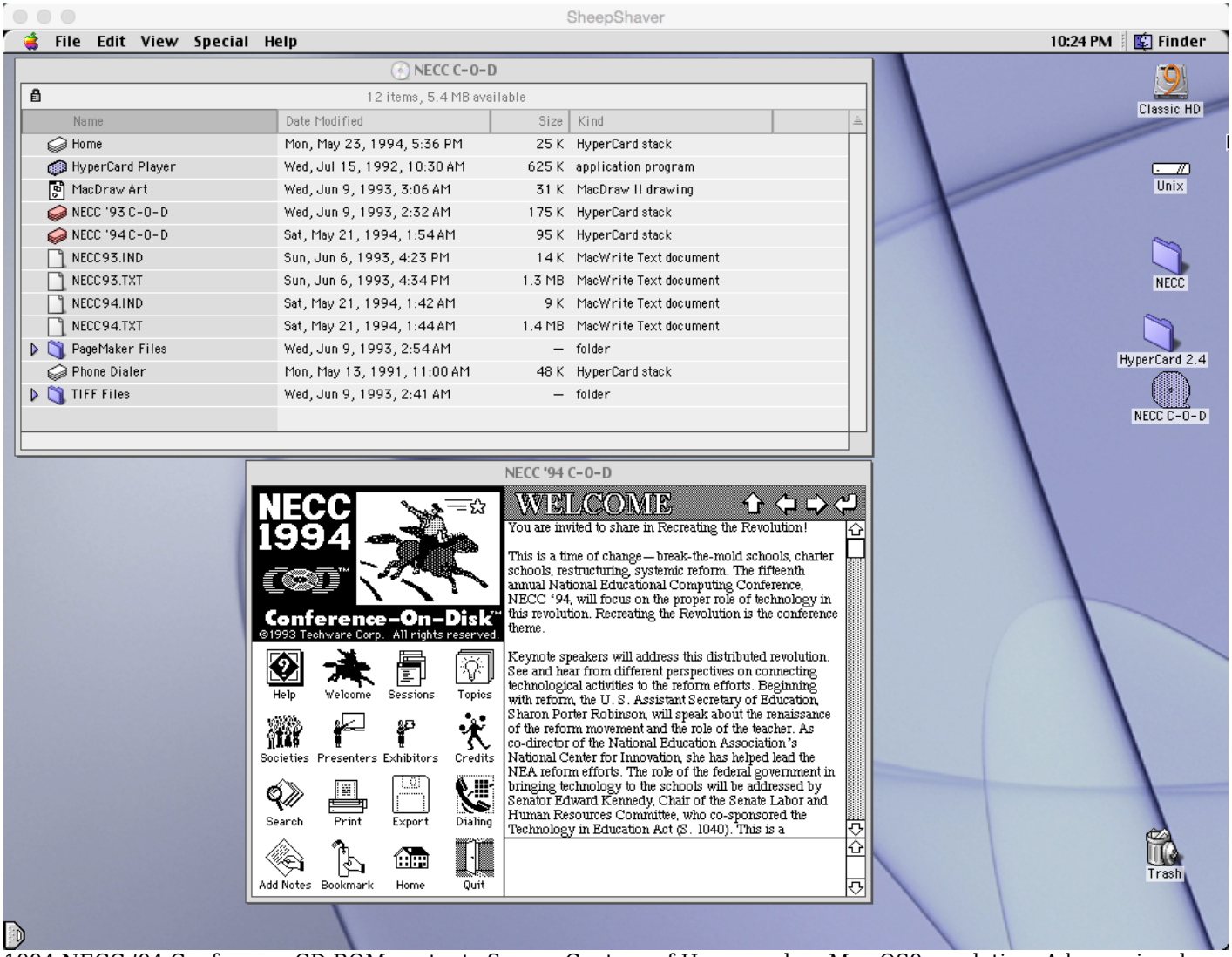
Credit: Media Production Services, Mount Royal College, Spring 1994
Originally created for INTERFACE ’94 (A Conference on Educational Technology: Tools and Solutions)
(web format transcoded from source – 1994-SciTechBBS.avi – video to digital conversion April 1998)

Script for 1994 SciTech BBS Video

Science and Technology Students at Mount Royal College have a 24 hour a day 7 days a week electronic resource. The SciTech Bulletin Board System to assist them with their studies. Mount Royal College’s SciTech BBS provides Science and Technology students with student to student and student to instructor electronic mail, course documents, and teleconferencing services. Students can access telnet and FTP Internet services to search International scientific information banks. Internet users can also connect to the SciTech BBS node on world wide web. Science students registered in a particular course can access course outlines, lecture notes, tutorial assignments, and be tested online through the bulletin board system. Mount Royal College’s Faculty of Science and Technology is committed to using modern telecommunications technology to enhance the learning experience of our students.

Steve Swettenham, Dennis Leask, Ray Sloan, and Bruce Horrey were the online distance and blended education pioneers of an academic PC based Internet BBS for learners and global community at a post-secondary institution in Alberta. This little known history brought together four unique individuals from various backgrounds to create an autonomous microcomputer communications system that would be freely available anytime, anywhere, to students, educators, and interested global community via a telephone modem, local area network, and Internet connection. The academic BBS was a mixture of social networking attributes and online courses.

Dennis and Steve are the remaining living founders to the story of an extraordinary achievement starting from no budget or institutional support, to a world class online educational system demonstrated at the 1994 National Educational Computing Conference in Boston (NECC ’94 CD-ROM). The NECC ’94 CD-ROM was created in Mac Hypercard format and is non-readable in modern operating systems. However, the following image of the CD-ROM contents has been recovered:

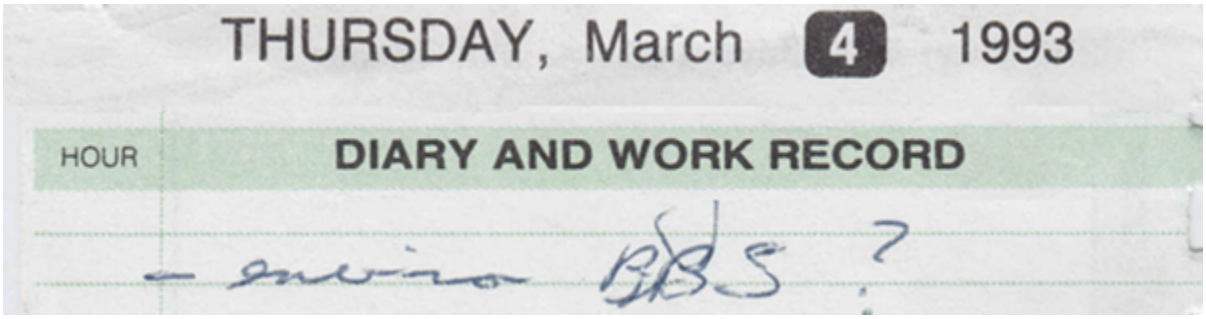


1994 NECC '94 Conference CD-ROM contents Screen Capture of Hypercard on Mac OS9 emulation. A lesson in why sustainable archival formats are important, as the Hypercard format is not accessible on modern operating systems without an emulator and an old Mac operating system ROM.

Internet Educational BBS Pioneers of Alberta - Part 2

Our story has many undocumented aspects due to the rapid nature of computing, academic design, and development activities focused on extremely short timelines to produce outcomes for stakeholders. Most of the software and hardware involved with the BBS project has been lost to history.

The SciTech BBS began with the idea of leveraging existing communications technologies to reach students at a distance via computers. On March 4, 1993 I met with Dennis Leask over coffee and we discussed the idea of using BBS technology as a distance education communication tool. We chose naming the server as SciTech BBS and listing the scitech.mtroyal.ab.ca domain (note – we originally had the domain name mtroyal.ab.ca but handed this over to IT to avoid future issues).



This scanned note documents the idea of an Internet BBS over a coffee break.

The SciTech BBS was a social network, MOOC, a virtual library, learning management system, real-time digital agora, and learning portal. Open e-books, course content, and Internet were intentional information connectivity features of the BBS. Dynamic and static text, graphical, audio, and video messaging provided human to human digital communications features. Teleconferencing (aka chat), whiteboard, and online testing provided real-time interactivity. The server also included a door to the college mainframe to computer based learning modules. The server hosted student websites, e-commerce, FTP, Email, and Telnet.

Students communicated with the SciTech BBS via the college computer lab local area network or off campus directly via a modem or indirectly via an Internet connection.

Developing the SciTech BBS was voluntary outside our normal duties. The software for the BBS was selected based on such qualities as ease of use for the host and client, cost of maintenance, stability, and scalability. All the BBS software was provided free of charge by the companies in our pursuit of integrating the technology in education. In March of 1993 we started with 1st BBS (a small Macintosh based application) on a Macintosh SE with a slow 14.4K modem to test the feasibility of using such technology on campus. By the summer of 1993 we changed to Synchronet BBS (PC application) as it has more features such as multiple levels of security and ability to add modules. In the Fall of 1993 we moved to Worldgroup BBS (PC application). We stayed with this product until the SciTech BBS project was terminated on the direct order of the Dean of the Faculty of Science and Technology.

The SciTech BBS was always voluntary for students and community. We provided open workshops on how to use the BBS for students and staff in the college. In October of 1993, the Calgary Herald reported on our development (1993 Calgary Herald BBS).

Internet Educational BBS Pioneers of Alberta - Part 3

In the early part of 1993, actualizing the academic BBS idea from coffee chat to practice was a series of rapid evolutionary steps in computing hardware and software. In addition, I had to learn each application, scrounge and build hardware, outside employment time. The initial prototype was the “1st Desk BBS” Mac software on a used donated old Mac SE with an old external 10 MB hard drive and one 14.4K modem, situated on a small table next to an available telephone outlet in the Chemistry, Biology, and Environmental Science department.

A faster computing system using MSDOS and Synchronet was implemented in the summer of 1993. Synchronet BBS software afforded a more complex BBS with functionality and speed beyond the aging Mac, which included multilevel security of forums and library. An Internet domain was acquired for the BBS. Originally the mtroyal.ab.ca domain name was selected but then handed it over to the IT department in exchange for the domain prefix – scitech.mtroyal.ab.ca – having Internet connectivity made it much easier to access the academic BBS from anywhere, anytime, rather than having to wait to login to the only 14.4K modem.

An interesting Synchronet add-on module for administration to the SciTech BBS provided a side feature of an automated sysop. This module created a “virtual system administrator” that would answer questions by endusers communicating with the BBS. I became aware of the impact of this “virtual system administrator” feature when a student asked me about the online conversation I had with them during the previous midnight. I had to explain to the student that it was a computer that they were communicating with, not me. However, the student was convinced that they had been communicating at a distance with another human, this experience expanded my view of education at a distance.

In the 1993 Fall term, students in the Faculty of Science and Technology had access to online courseware, open e-texts, forums, email, and support. The primary point of access was a computer with a modem. During late 1993, the Synchronet software was exchanged for MSDOS Worldgroup with a Local Area Network (LAN) cable and three 14.4K baud modems. Worldgroup provided similar security flexibility but extended features such as virtual whiteboards, chat, e-commerce, and connectivity to mainframes. During this period of time, LXR-Test was introduced as a way of asynchronous online testing, via runtime test packages that students downloaded and executed at their convenience. Eventually LXR-Test evolved into an online server that was able to run testing synchronously without having to download executables. However, such a feature required a separate computer due to the intense tasking operations of the testing software on the memory of the operating system, particularly with more than a few students accessing the system simultaneously.

SciTech BBS 1994-03 Steve Swettenham (aka Sysop) with server.

In 1994, the SciTech BBS was demonstrated at the National Educational Computing Conference – NECC '94 (1993-12-26 NECC_94 Proposal). Although, the BBS presentation was situated in the nether reaches of the conference facilities in the "Internet room," the result was an overflowing audience with no standing room. The presentation was made in ClarisWorks and run on an Apple laptop donated by Apple Canada (equipment list). That experience demonstrated the gaps between student digital needs at a distance, financial feasibility, and growing Internet demand.

The educational BBS had a wealth of functionality with more than 16 simultaneous nodes with no degradation in connection, all on a 486 PC microcomputer. The 14.4K modems were upgrade to 56K modems, and the SciTech BBS was regularly accessed by institutions in Australia, New Zealand, Canada, Europe, and the United States Consulate in Calgary. The SciTech BBS included email, forums, teleconference, whiteboard, library, doors to mainframe computer for interactive computer managed learning modules, surveys and polls, online testing, databases, RipScrip, telnet, FTP, website hosting, accounting, multilevel security (class and key), video conference, and e-commerce. Worldgroup BBS software was stable with downtime only for momentary maintenance. There was no secondary computer for development, all design and development was happening in real time on the production machine. Many times I wondered what would happen if the computer electronics died. However, with a UPS and surge protection on all connections between the computer and peripherals, there was never a loss of equipment. Backup was basic copy to Zip drive and CD-R.

Students were accessing the SciTech BBS via Mosaic and Netscape web browsers, LAN, email clients, telnet, Worldgroup graphical client software for Windows and Mac. The MSWindows 95 operating system provided the graphical experience to interact with the SciTech BBS. Personal website building was an inherent feature for students, often used to promote their portfolios to potential employers. The promotion of the SciTech BBS had global and local community outreach.

Community Outreach Example

Date: Wednesday, March 15, 1995 10:20pm Electronic Mail
From: Guest Msg#: 5410
To: Sysop
Re: Environmental Tech Program

Hello,
i read the recent editorial in the Herald and found your
phone number in that article. i think this bbs is an excellant
idea. i was hoping to acquire some detailed information on the
environmental technology program offerred at MRC. If you could
please forward this email to the appropriate area i would be
forever in your debt. i can be reached at _redacted_@freenet.calgary.ab.ca

Thank you,
Scott

There were many institutional wide workshops for faculty and students on how to use the SciTech BBS. There was great interest from many other faculties on how to implement their own BBS to serve students. However, such bubble up innovations from staff had ripple effects on the agendas on certain departments of the institution who took exception to such digital diversity, from the perspectives of open control, excessively low cost finances, and academic freedom. Such tensions would eventually doom an innovative project that had served students and faculty locally, regionally, and globally.

Internet Educational BBS Pioneers of Alberta - Part 4

The SciTech BBS was a central focus for environmental students to communicate digitally at a distance with instructors and learners that proved to be stable and accessible for any computer of any age with a

modem or network connection. However, in 1996 several tragic events directly impacted the operation and software supporting open distance and blended education for the SciTech BBS.

On August 6, 1996 Tim Stryker (https://en.wikipedia.org/wiki/Tim_Stryker), died suddenly leaving the Galacticomm company without succession and a greatly diminished capacity to leverage BBS technology in a rapidly evolving Internet environ. Since the SciTech BBS existed on Worldgroup software, there was growing uncertainty in future software and hardware support and development.

On December 31, 1996, Ray Sloan died suddenly from a brain aneurysm. Ray was a formidable advocate, beta tester, and educational practitioner with the SciTech BBS. The loss of Ray as a key founding stakeholder foreshadowed the future of the SciTech BBS. Indeed, a directive meeting between the Director of Information Technology, myself, and administrators was the staging for a hostile takeover and decommissioning of the SciTech BBS. During the aforementioned meeting the Director of Information Technology stated that the SciTech BBS was hindering the ability to justify a million dollar budget when the SciTech BBS was operating with less than a few thousand dollars per year for digital communications. In particular, the email functionality of SciTech BBS was perceived to compete with a commercial agenda requiring a million dollar budget. The fallout from the aforementioned administrator's meeting was the eventual compulsory order by the Dean of the Faculty of Science and Technology to permanently shutdown the SciTech BBS. The remaining founding stakeholders reluctantly complied.

The termination of the SciTech BBS was announced online via email and website to assist students with their digital learning needs. In example, students with e-portfolios were advised on alternative off-campus hosting options.

Final email message:

> NOTICE OF CLOSURE: On July 1, 1999 the SciTech ISP/BBS will be shutdown permanently. Due to trends in institutional technology we are ending the experiment on campus. We would like to thank our many sponsors, whom over the years have contributed much to the success of integrating synchronous and asynchronous telecommunications as an extension of the classroom environment.

Final homepage before permanent shutdown:

SciTech ISP Permanent Shut Down on July 1, 1999

Serving Students Since 1993 @ Mount Royal College

We are the last known microcomputer based BBS/ISP in Canada running the Online Community Worldgroup Server 3.2NT expressly for students in a post-secondary institution.

We would like to thank our many sponsors, whom over the years have contributed much to the success of integrating synchronous and asynchronous telecommunications as an extension of the classroom environment.

We have enjoyed providing opportunities for students to communicate in a global village.

Now the experiment is over.

Š May 11, 1999

Last webpage message before final shutdown of SciTech ISP (AKA SciTech BBS)

In addition to the extensive integrated functionality of the system, the SciTech BBS also hosted student e-portfolios, a free Java Applet library mirror site for Fu-Kwun Hwang at NTNU Virtual Physics Laboratory, and hosted the Goose cam website. The Goose cam website was a real-time webcam at the second floor window of the department of Interior Design focused on a Canada Goose that chose a planter for nesting and producing goslings, returning annually to the same location. The Goose cam equipment and website were confiscated by the Information Technology and redemployed as their own site, ignoring plagiarism and attribution. A noteworthy observation to the closure of the SciTech BBS was the few reactions to the event, as students did not protest their right to have the SciTech BBS on campus, rather the innovation and services to students were quickly forgotten by most, but remembered fondly by the few. There were a few email responses of support such as,

From: studentname.confidential@scitech.mtroyal.ab.ca
Sent: Saturday, May 15, 1999 9:37 PM
To: Sysop@scitech.mtroyal.ab.ca
Subject: closing
Hi Mr Sysop,
Sorry to hear you are closing this BBS
It was comforting to have Scitech as an alternate all these years.
Do you know what is replacing it ?
Thanks and regards
Studentname.confidential

SciTech Hosted Disciplines

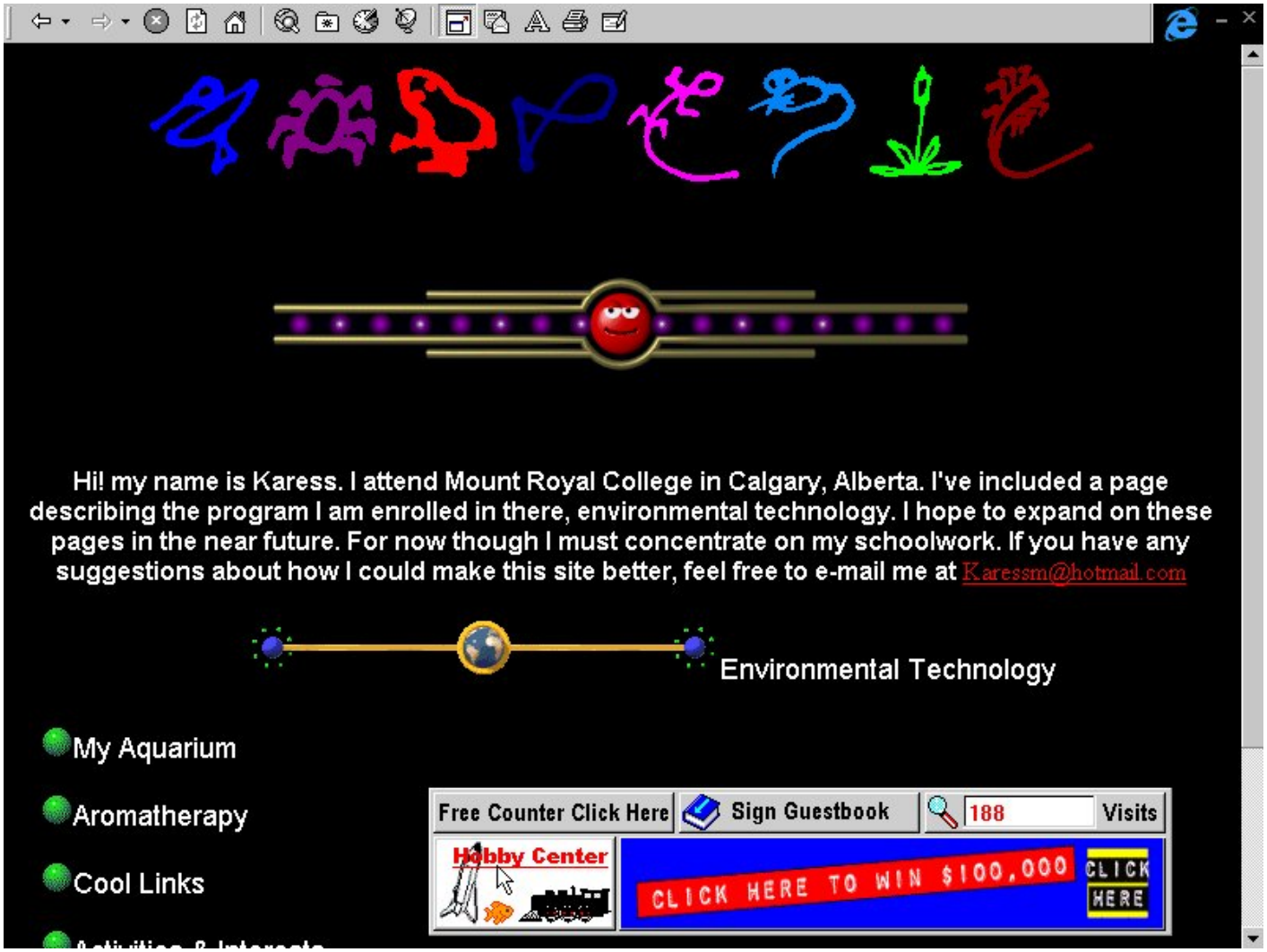
The Scitech BBS/ISP hosted courses from:

- Environmental Science
- Biology
- Chemistry
- Nursing
- Economics/Political Science
- Business
- Earth Sciences

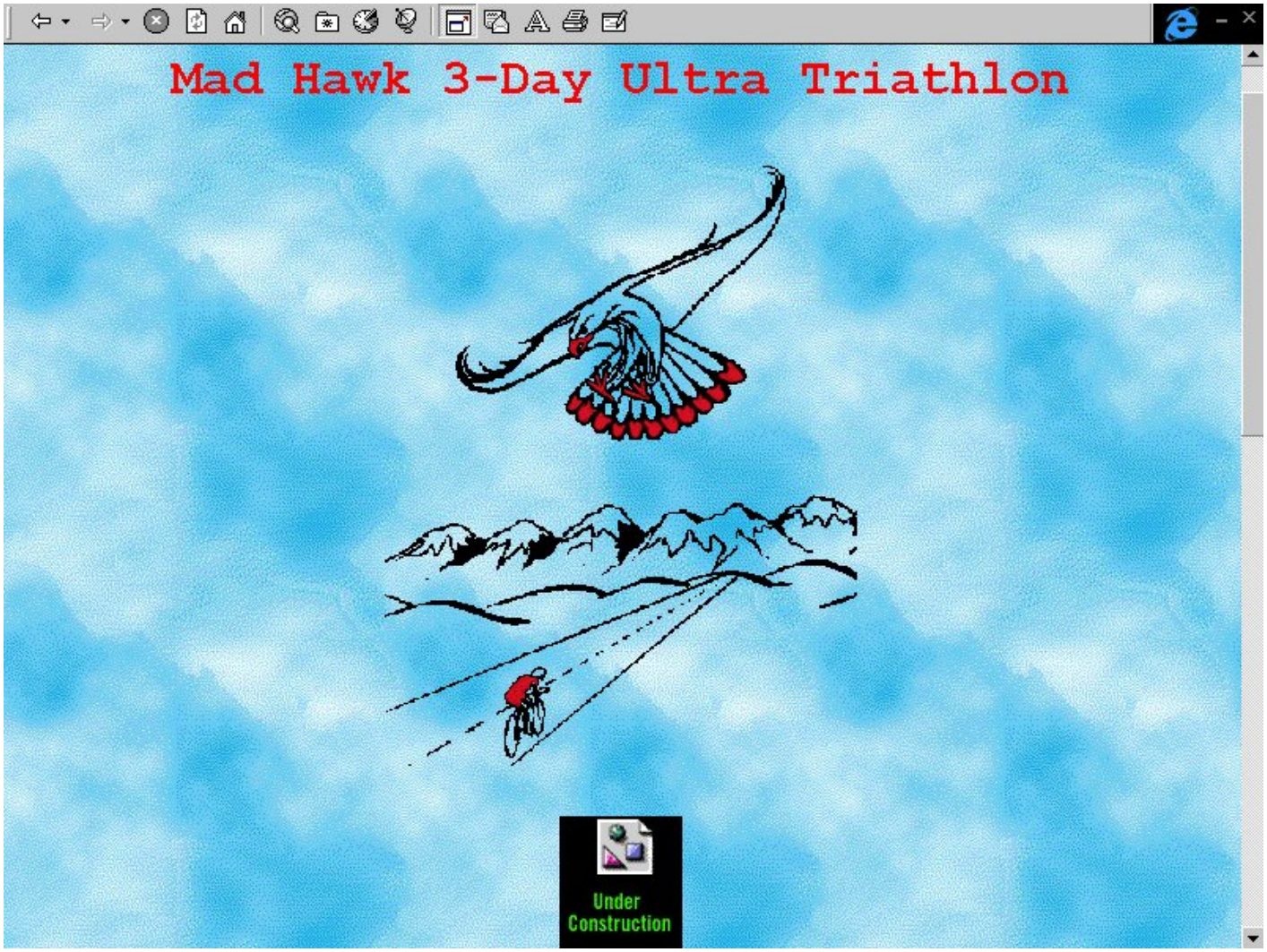
SCITECH hosted Student Websites

Members of the SciTech BBS/ISP were encouraged to build their own websites. Example student home pages screen shots are as follows:

Portfolio student homepage



Portfolio student homepage



Student Homepage

Backstory

The backstory offers further historical notes on computing technologies and BBS services available to students, educators, and the digital global village.

Accomplishments

The SciTech BBS creation on March 1993 and forced termination on July 1, 1999 was a longitudinal experiment with agile design. Every aspect of the project involved pedagogical and technological understanding with recurring reflection and modifications where necessary. Since the project was sustained largely by voluteerism and donations, there was no leeway for failures in the system. It is noteworthy that although the political climate of the educational institution was unsupportive of our innovative application of BBS for online learning, the SciTech BBS continued to function flawlessly for six years. The following listings are extracts from documents published on a web formatted CD-ROM from 1998.

Primary objectives

- A value-added electronic extension to the classroom to serve the students and instructors; also known as blended-learning.
- Provide a stable, cross-platform, cost-effective telecommunications, open 24 hours a day, all year for students, instructors, staff, and global community.
- Cyber-autonomy for students and educators of Mount Royal College.

Goals

- Paperless electronic communications.
- Global collaboration.

- Electronic information that is transparent to the technology.
- Freedom of access to information.
- Freedom of expression to create in cyberspace.
- Anticipate student needs through the understanding of affordable educational technology.
- Multidimensional solution to the multidimensional problems of innovative computing technology in education.

Cost to ENDUSERS

- Free lifetime membership

Limitations

- The electronic telecommunications only simulates the gregarious nature of humans.
- Due to extremely limited funds, all decisions with regards to the SciTech ISP and classroom interaction must continue to provide positive results with seamless integration of the technology with the educational eviron.

Accomplishments

- 1993 – First to run a full compliment of Internet / BBS / ISP services on one microcomputer in Mount Royal College.
- 1994-06-15 – Presented at NECC ’94, Boston.
- 1997-02 – Launched student web page self-management.

Seed Projects arising from the SciTech BBS

- Launch of the Indecol Webserver on November 25, 1997, employing a Microsoft BackOffice Server.
- Innovative Distance Delivery Techniques for Educational Technology.
- Distance Delivery of Testing through LXR-TEST Professional Scoring Edition site license, donated by the Department of Chemical, Biological, and Environmental Sciences. Also used by the Department of Computer Science and Information Systems and the Department of Political Science.
- Multimedia development and distribution using digital video, and sounds (e.g., Trout sampling).
- Beta tester for Galacticomm Inc.
- Geographic Information System software development.
- Provided antivirus software at extremely low educational pricing for students and staff with support via SciTech ISP.

Presentations

NECC ’94

NATIONAL EDUCATIONAL COMPUTING CONFERENCE
BOSTON, MASSACHUSETTS
JUNE 13-15, 1994

Recreating the Revolution

Telecommunications Showcase – Devoted to demonstrations and interactive sessions showcasing current state-of-the-art educational telecommunications. Presentations and hands-on activities will occur throughout the conference.

Wednesday, June 15, 1994 8:30-9:30 AM Room 210

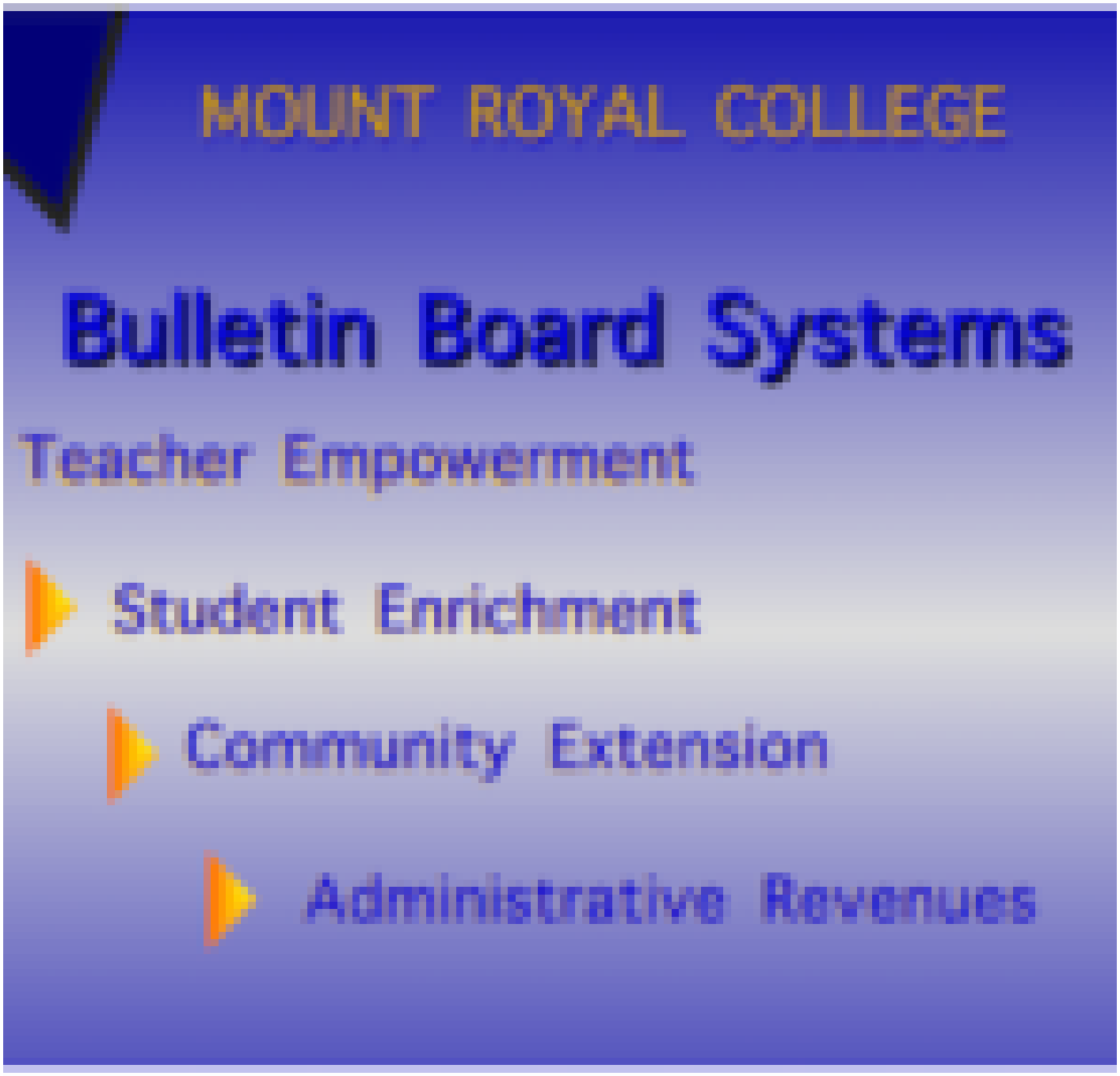
BBS’ Teacher Empowerment, Student Enrichment, Community Extension, and Administrative Revenues

Presenters: Steve Swettenham and Dennis Leask, Mount Royal College

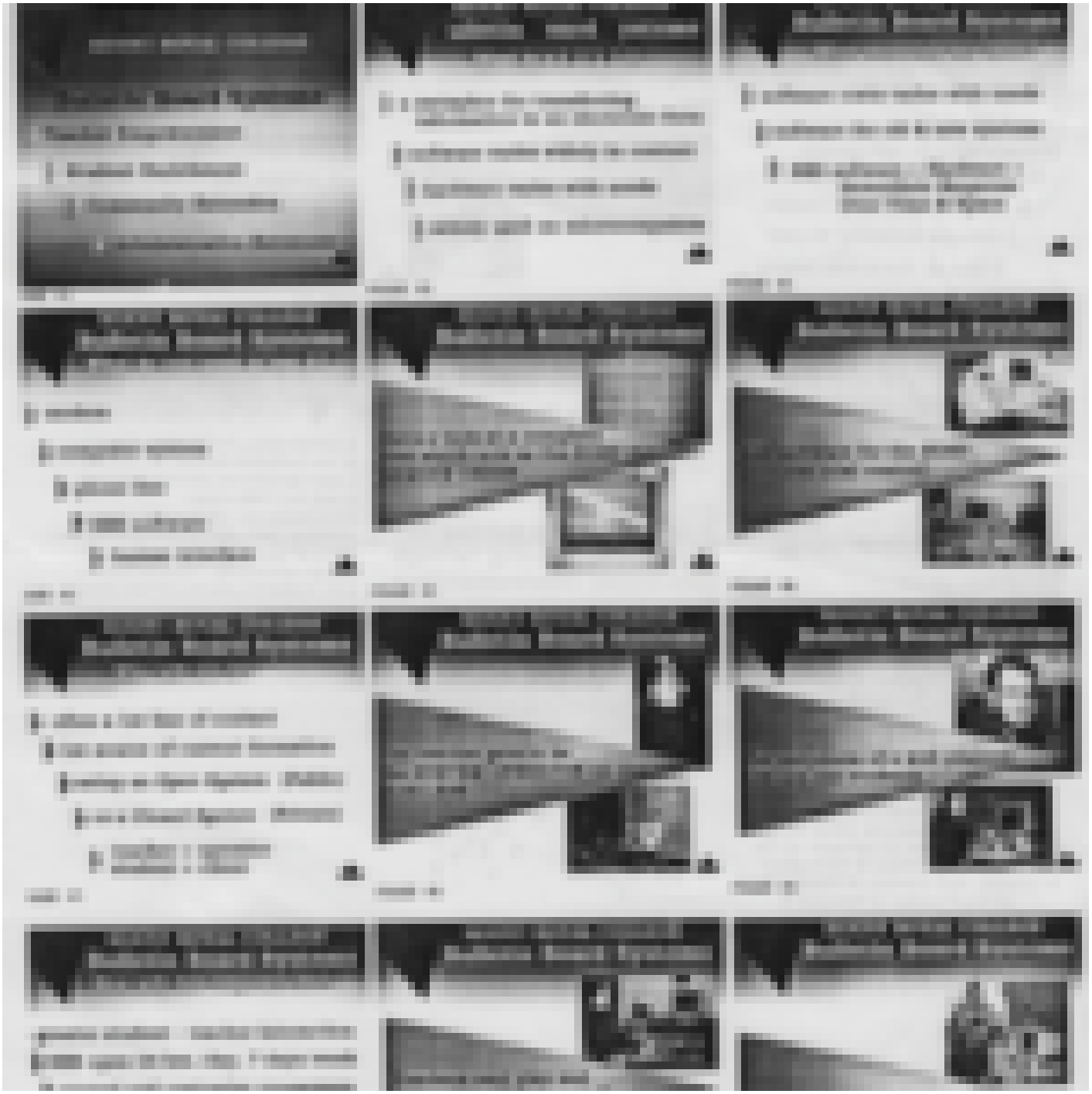
We will spend a few minutes outlining the uses of a Bulletin Board System (BBS) both on the Information Expressway of Education and as a scenic, affordable alternative to the potential for Superhighway gridlock. We will then encourage attendees, with step by-step-instructions, to explore how easy it is to set up their own BBS using ProComm software in the Host mode for PC’s or 1ST BBS software for the MAC on the available workstations. In addition, we will have examples of the best BBS software available for examination (i.e., 1St BBS [Mac], Second Sight [MAC], Major BBS [PC], Roboboard [PC], PCBoard [PC], Syncronet [PC]).

We will be presenting a continuous PhotoCD session, subject to availability of equipment, outlining our operational Educational Environmental BBS at Mount Royal College, and will be available to answer questions concerning the advantages of BBSs.

[PDF [39KB] NECC ’94 Proposal by Steve Swettenham and Dennis Leask]



PDF [4MB] NECC ’94 Presentation by Steve Swettenham and Dennis Leask – Internet Room 210 – Wednesday, June 15, 1994 08:30-09:30H, in the very back of the conference (we had standing room only in our shared space).



PDF [5MB] NECC ’94 Presentation Hardcopy by Steve Swettenham and Dennis Leask – Slide presentation handout at the Internet Room 210 – Wednesday, June 15, 1994 08:30-09:30H

Ingham, D. (1994). *Recreating the revolution. Proceedings of the Annual National Educational Computing Conference (15th, Boston, Massachusetts, June 13-15, 1994)*. International Society for Technology in Education, 1787 Agate St. https://eric.ed.gov/?id=ED396665

Ingham, D. (1994). *ERIC ED396665: Recreating the Revolution. Proceedings of the Annual National*

Educational Computing Conference (15th, Boston, Massachusetts, June 13-15, 1994). National Educational Computing Conference. http://archive.org/details/ERIC_ED396665

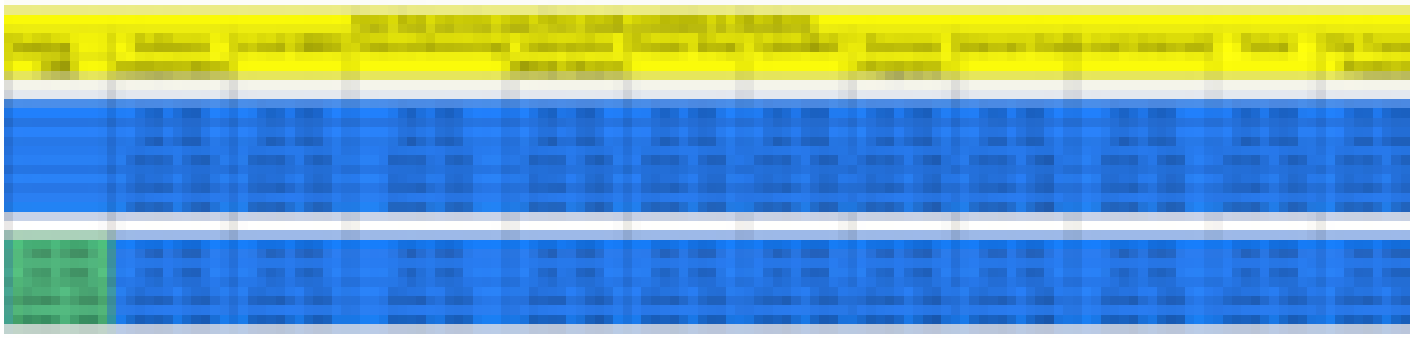
Lilavois, J. (1994). *NECC 1994 Conference proceedings* [CD-ROM]. Techware Corporation.

Miscellaneous:

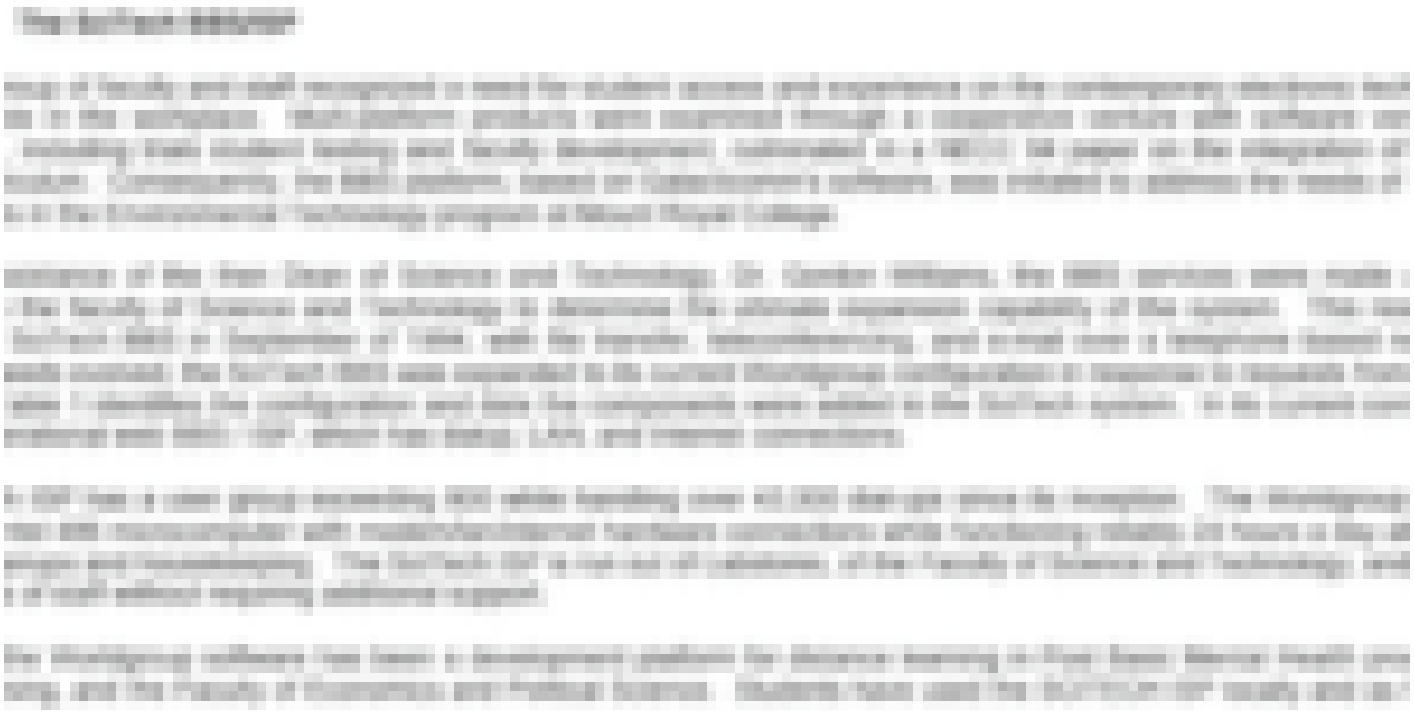
- PDF [34KB] Preliminary ideas outline for NECC ’94 presentation
- PDF [78KB] How to create a HostBBS with Procomm software

CAMPUS

PDF [310KB] SCITECH Internet Service Provider by Dennis Leask, 1996-05-29



[PDF [53KB] Scitech BBS and Courses History by Dennis Leask (1996)]



PDF [12KB] Brief on Activation Dates for Services and Courseware by Dennis Leask (1997)

PDF [726KB] Environmental Technology Industrial Ecology by Dennis Leask (1998-05-07)
Integration of SciTech BBS and academic program

In the News

- Science course info always accessible on the web. MRC News, February 19, 1998. Page 7
- BBS offers information. MRC News, February 5, 1996. Page 3
- Testing software offers multi-media exams. MRC News Brief, October 23, 1995. Vol 4, No.10.

- The Science and Technology BBS . . . MRC News Brief, October 10, 1995. Vol. 4, No. 8
- Science and Tech eyes the Internet. MRC News, December 5, 1994. Vol. 11, No. 3; ISSN 0825-8600
- Teaching Technology saves money. MRC News Brief, October 17, 1994. Vol. 3, No. 6
- Classes now trying E-mail. by Paul Coates, The Journal (MRC campus paper), December 8, 1993. Page 5
- COLLEGE GOES HOME. Calgary Herald, Thursday, October 14, 1993. C3
- College ET students phone Sloan. MRC News Brief, September 27, 1993. Vol. 2, No. 5

SciTech Web Pages

The SciTech BBS had been through four major iterations of BBS applications and three different operating systems (Mac OS 7, PC DOS 6, and Windows NT4). Although the SciTech BBS was connected to the Internet in 1994, there are no surviving web page screen captures from the computing system. The terminal and client based interfaces are exemplified on the SciTech BBS User Interfaces page.

However, the Internet Archive WayBackMachine (http://web.archive.org/) has 51 captures of the URL http://scitech.mtroyal.ab.ca between December 26, 1996 to March 23, 2004 (http://web.archive.org/web/*/http://scitech.mtroyal.ab.ca/). Unfortunately not all the website captures are complete, but these records do provide further external historical evidence to support our story. According to the Internet Archive WayBackMachine, the Alexa Crawls started in 1996, thereby missing the SciTech BBS online activity between 1994 to 1995. Although shutdown of the SciTech BBS was officially done on July 1, 1999 in compliance with an order by the administration, there were continued website captures until 2004. Based on the Internet Archive WayBackMachine captures after July 1, 1999 to 2004, the SciTech BBS content appears to have mysteriously been active without our knowledge or consent. We can't explain this phenomenon, but we appreciate the virtual life after death of our educational BBS innovation.

The following web pages were more recent samples from our system archives:

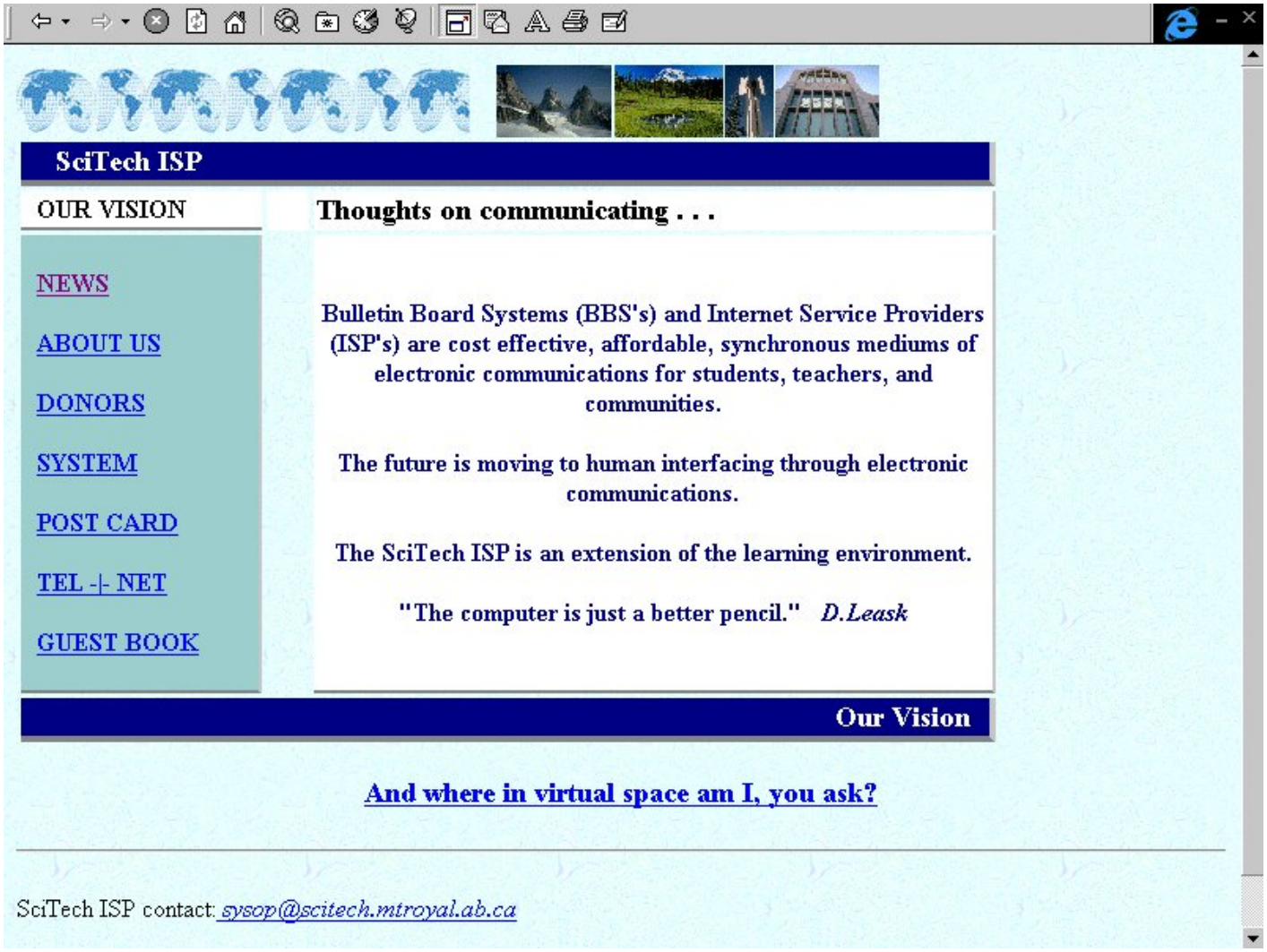
1998 – Home Page

1999 – Home Page

SciTech DSP

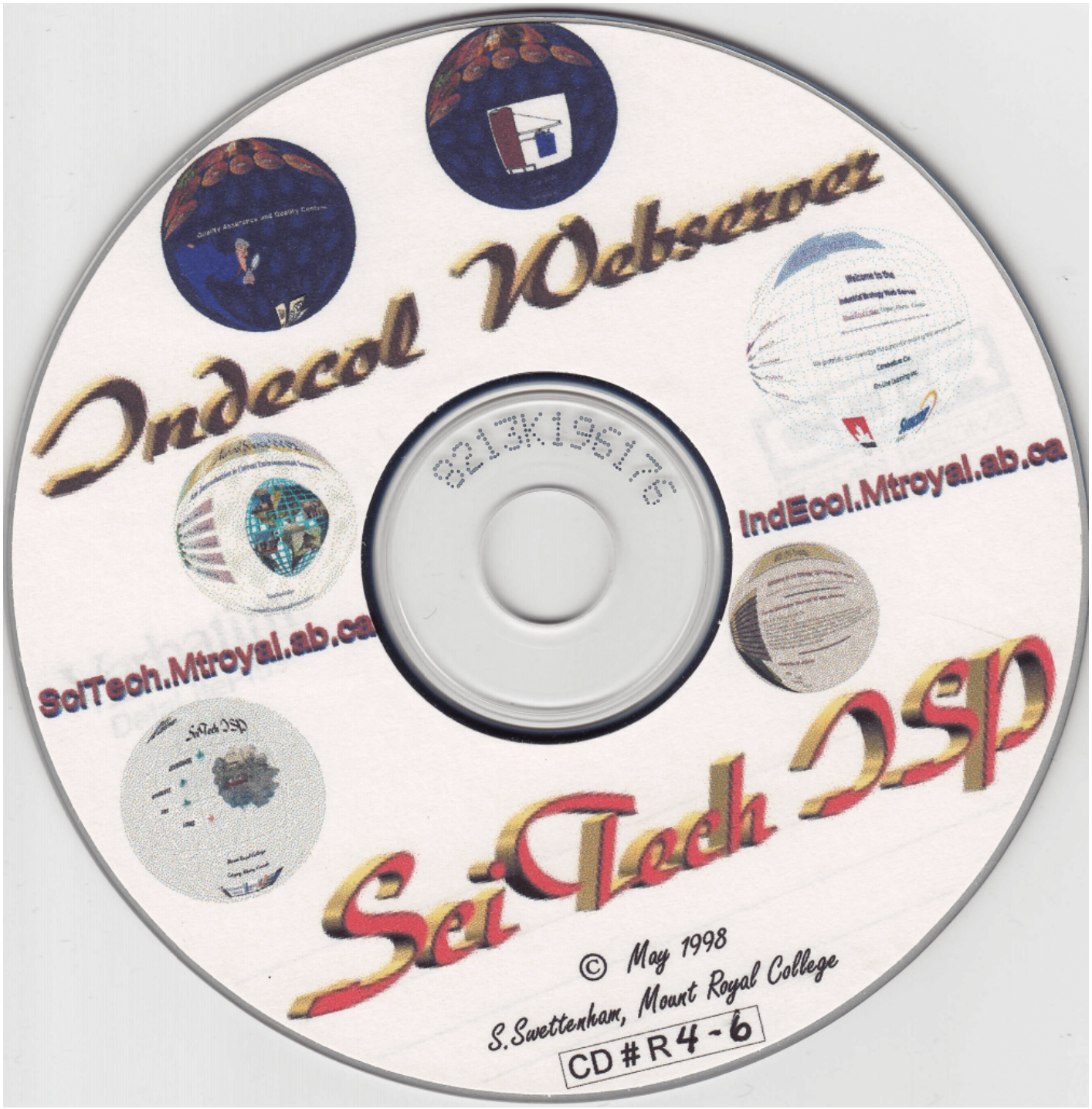
Est 1993

1998 – Our vision page

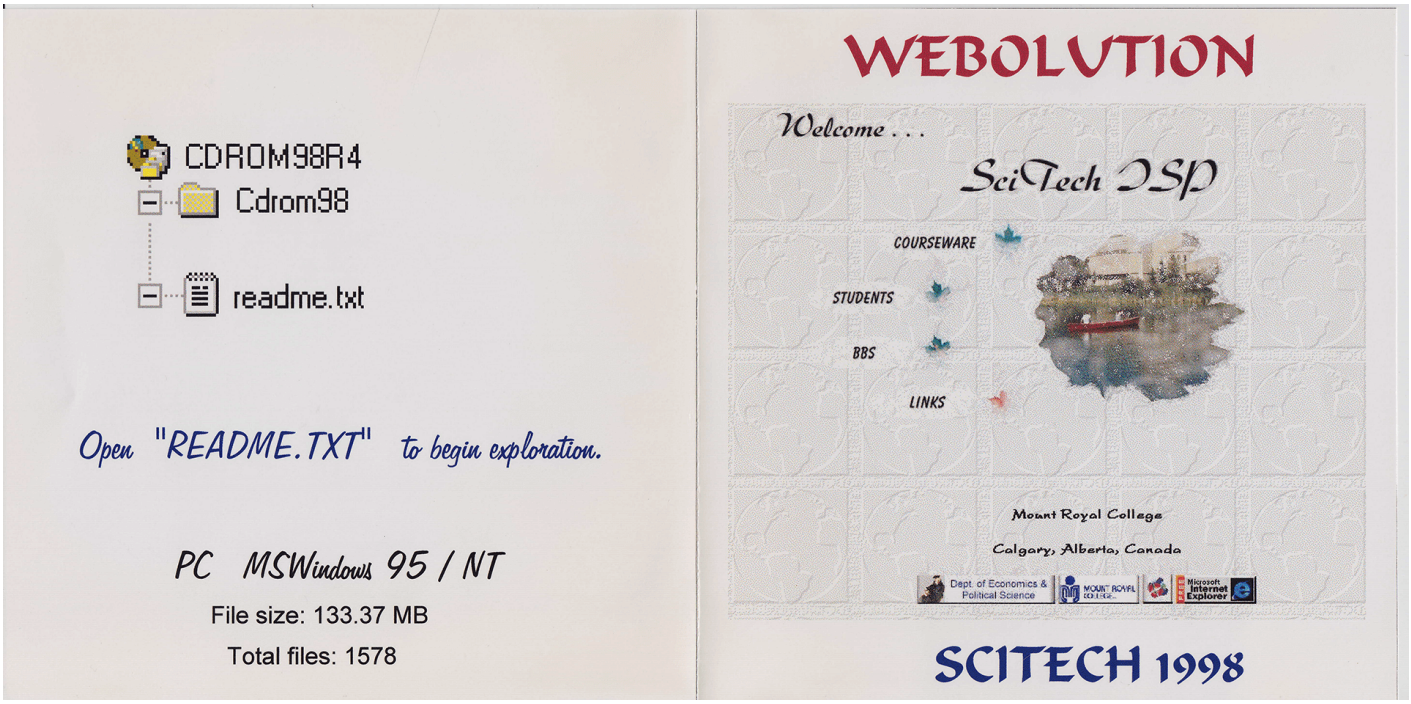


1998 WEBOLUTION CD-ROM

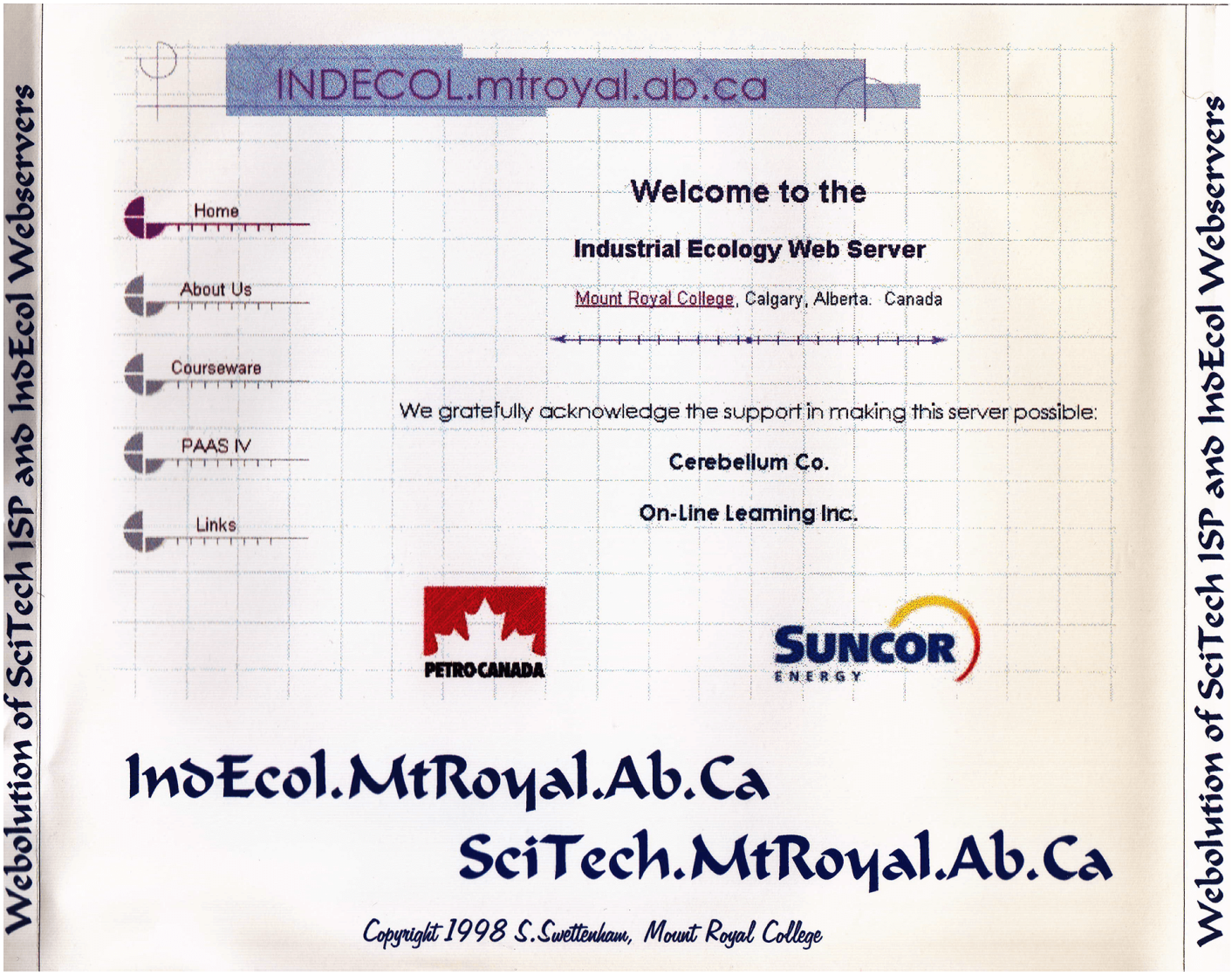
A compendium of documents about the SciTech BBS was created in a website format and archived onto a CD-ROM. The aforementioned compendium size is 133.37 MB, and thus is not available for download within this e-book. However, the majority of the CD-ROM content has been rejuvenated in this e-book format. The following images are the from the CD-ROM label and case front and back covers:



1998 CD-ROM Label for SciTech ISP and INDECOL Webserver



1998 CD-ROM Case Front Cover for SciTech ISP and INDECOL Webserver



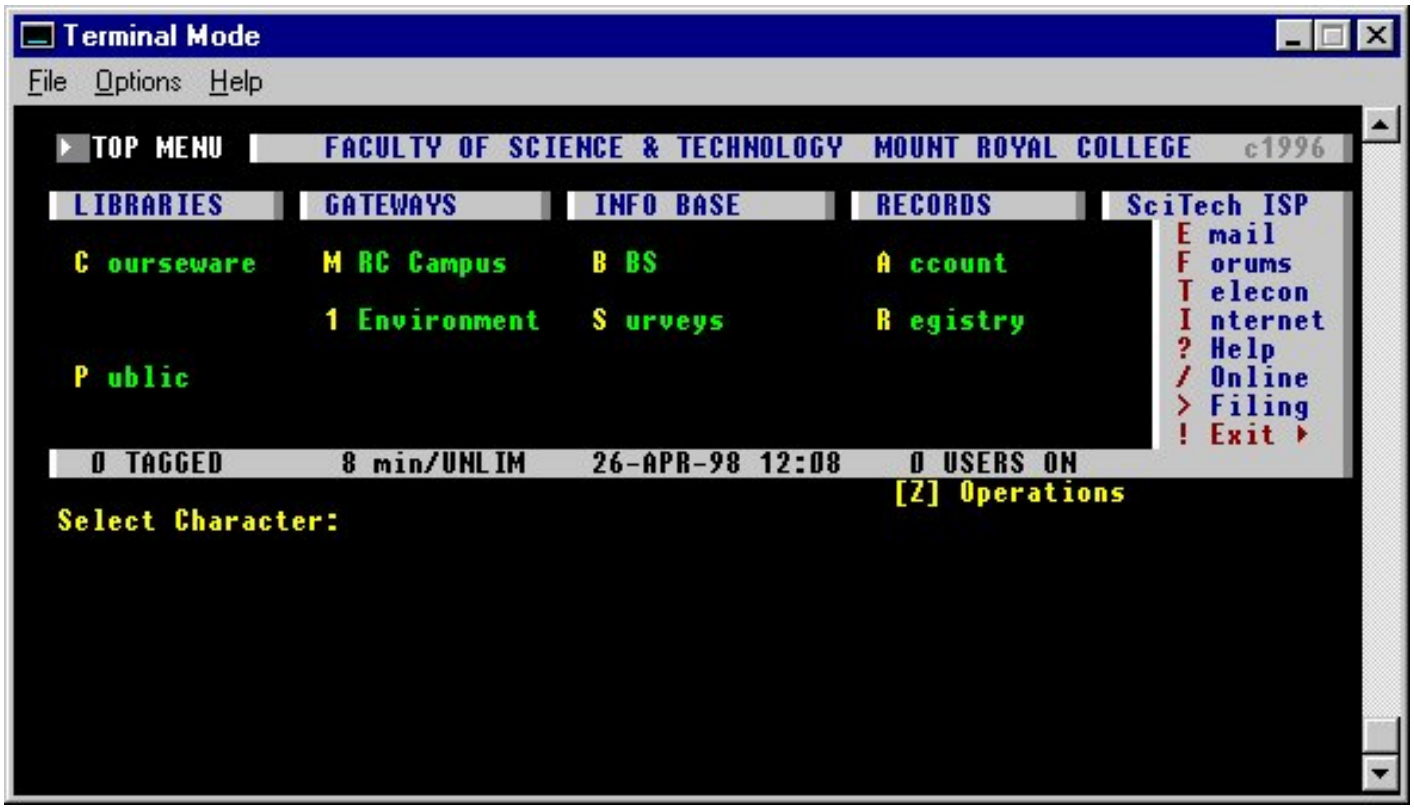
1998 CD-ROM Case Back Cover for SciTech ISP and INDECOL Webserver

SciTech BBS User Interfaces

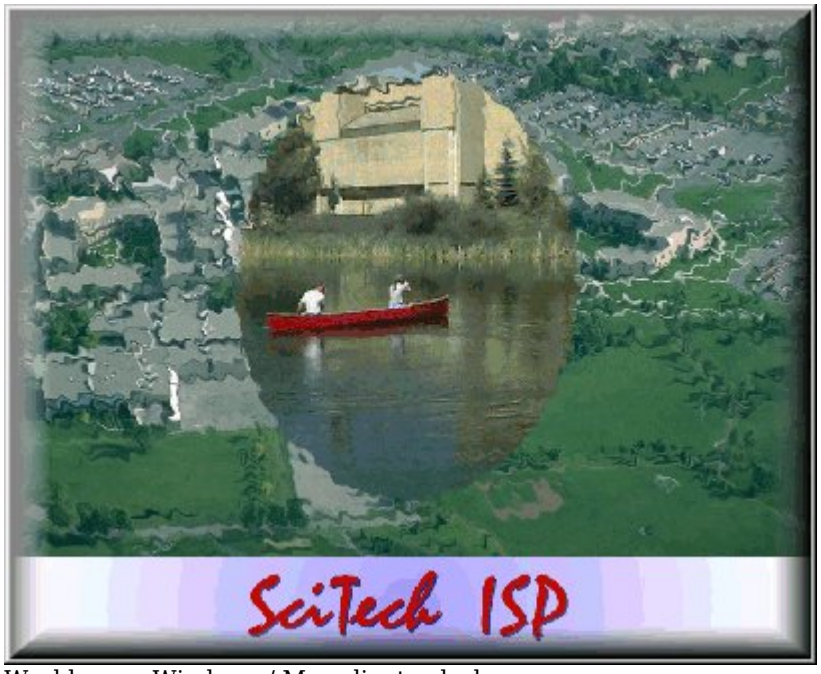
There were many points of entry to the SciTech BBS for endusers, from a modem terminal view to a Windows / Macintosh client application, and web browser. A history of BBS interfaces is examplified in Web the RIPper by Ernie Smith (Jul 21, 2020). Unfortunately there is no surviving screen shot of the SciTech BBS RIPscrip Graphics. It is noteworthy that back in the 1990's, terminal mode was much faster to render on any display and had easily accessible keyboard functions, whereas RIPscrip Graphics

benefited from more computer processing power, a higher resolution display, faster modems, and mouse peripheral.

Terminal View



Worldgroup Client View



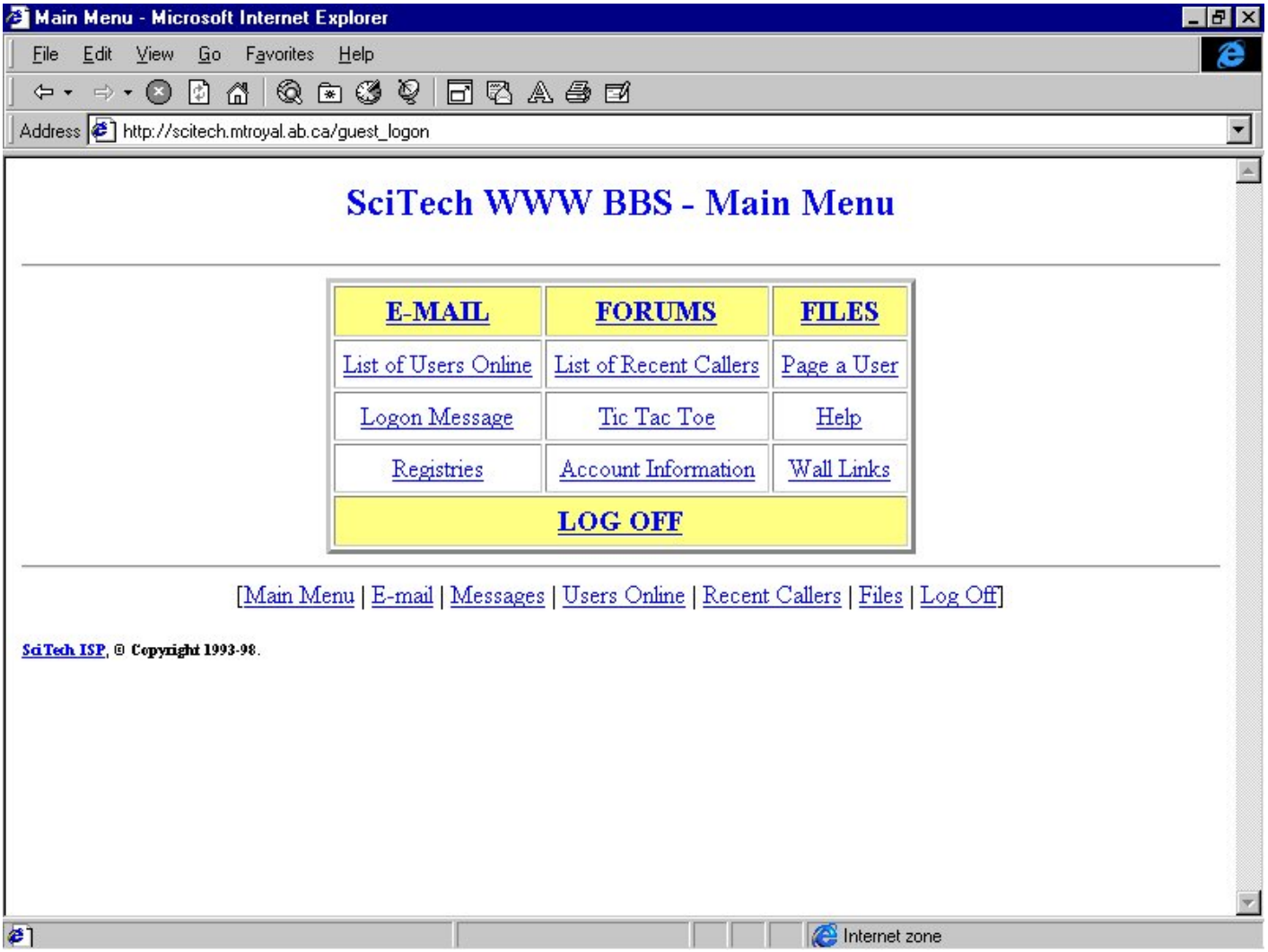
Worldgroup Windows / Mac client splash screen.

Worldgroup Windows Client from administrator viewpoint.

Teleconference with group whiteboard, chat, and image share.

World Wide Web View

1998 Worldgroup Webview login



1998 Worldgroup Webview

SciTech ISP System Configuration

HARDWARE

Initially, the SciTech BBS was piloted on a Mac SE with 1st BBS software (1st Desk Systems Inc.) and a single 14.4K modem. The BBS software was changed to Synchronet which required a PC computer. Hence, a PC 486 – 66 MHz was built with 20 MB RAM, a 2 GB hard drive, 3 phone lines, 4 local area

network connections, and 25 TCP/IPA nodes. A PC 386 – 33 MHz with 8 Mb RAM and 540 hard drive provided the college mainframe doorway connect to the PC 486. The PC 386 also served as a development tool, archival library, and emergency backup for the PC 486. The hardware was built from donations, and old parts scavenged from the institution garbage. It is noteworthy that both aforementioned Mac and PC computer systems had been donated by the Environmental Program through the Department of Chemical, Biological and Environmental Sciences, Faculty of Science and Technology, with hosting and management by the Department of Lab Stores. Synchronet was used for a short period of time until I was able to migrate to the Galacticomm BBS software and building of a generic IBM compatible Pentium PC: P133MHz with 32 MB of RAM and two 1.2 GB hard drives, as a major upgrade from the PC 486. The PC 386 replaced the PC 486 and was redeployed as a student computer in the chemistry tutorial centre. A Galacticomm communications board (supporting up to 8 modems) was eventually installed to support three modem lines with 56K high speed fax/data modems. There was also student access via Local Area Networks and Internet (FTP/TELNET/WWW).

SOFTWARE

The SciTech BBS began with the 1st BBS software, described by the *Macintosh Product Registry*[1] magazine as “a programmable relational database and bulletin board” that “has messaging and file transfer capabilities, and the Host module automatically maintains an activity log” (“Desktop Communications / Telecommunications Software,” 1990, p.61). However, the Macintosh application was replaced in a few months with Synchronet BBS on MS-DOS, as it had more complex account security and features. Although Synchronet BBS proved useful, it did not have the expanded features and modularity (including modem communications expansion board hardware) integrated with the Major BBS software on MS-DOS version 6.2. Galacticomm changed the Major BBS to Worldgroup for the Microsoft Windows platform. The final ISP software package installed on the SciTech ISP was Worldgroup 3.0 on Microsoft Windows NT4.

All the BBS applications tested and deployed in a production environment were initially donated to our educational BBS project. In example, the Major BBS software was donated by Galacticomm in support of developing BBS technology for the classroom and was featured at NECC ’94. INTERNET, Web BBS, and LAN connectivity modules provided the widest possible access for students. Other modules from third party vendors had been added to enhance the functionality of specific portions of the ISP such as Online Shopping. In addition, various software accessories have been graciously donated to the Faculty of Science and Technology between 1993 and 1999, included a site licence for LXR·TEST and Xword Java Applet.

The SciTech ISP (aka SciTech BBS) had the following services:

- 38 users online simultaneously
- Full accounting and security
- Full dial-up Internet (WWW/FTP/TELENT servers and clients)
- Domain Name Service

- Client/server module
- Local and Internet email (SMTP and POP3) and news (NNTP, newsgroups, and forums)
- QWK-Mail
- SPAM Stopper
- IRC client
- RLogin client
- Finger server and client
- Ident Server
- Listservers and infoservers
- File libraries and file transfer
- Polls and Questionnaires
- Registry of Users
- Multimedia teleconference (including whiteboard)
- Doors applications (i.e., Lotus123, Recipes etc.)
- Global controls
- Webmagic (web development, management, accounting,and security)
- Omni-mall (Online Commerce)
- Community Calendar
- Fax Online
- Logon/Logoff Notices
- Remote Sysop
- Custom Menues/RIP/Controls
- Weblines (World Wide Web BBS hosting interface)

Worldgroup Module Name (Scitech ISP, July 1999)

- Menuing System
- Custom RIP Lib. Download
- Omni-Mall for WG 3.1
- OmniMall for WG3NT
- World-Wide Web Server
- DPI POS Module
- Internet Aliasing
- Domain Name Service
- Fax/Online
- Online Facsimile Service
- File Libraries
- Finger Client
- Finger Server
- Electronic Mail

- Forums
- FTP Client
- FTP Server
- Ident Server
- Doors
- SMTP Services
- NNTP Services
- Logon Notices
- Polls and Questionnaires
- POP3 Server
- QWK-mail
- Registry of Users
- Rlogin Client
- Remote Sysop Menu
- Teleconference
- WL Scheduler
- WorldLink Transfer
- WL Teleconference
- Telnet Client
- Account Display/Edit
- Web Server Active HTML
- Logoff (end session)
- Flower Shop
- ActiBase Client Server
- Editor
- Client/Server Mode14
- File Transfer Service
- Data Entry Service
- Menu-ize Global Commands
- Mountain Mail

Desktop Communications / Telecommunications Software. (1990, Fall/Winter). *The Macintosh Product Registry*, 61. https://vintageapple.org/catalogs/pdf/Macintosh_Product_Registry_1990.pdf

SciTech BBS Email Archive

The following emails are samples extracted from the Scitech BBS (aka SciTech ISP):

Date: Thursday, December 1, 1994 10:45am Electronic Mail
From: David W_redacted_ Msg#: 1549
To: Sysop
Re: Reply to your reply

I use e-mail regularly so this isn't exactly new. However, the idea of having students access things like lecture notes, course outlines, and electoronic forum seems like a neat idea. I wonder if it will happen in our lifetime….

David

Date: Wednesday, October 19, 1994 9:07pm Electronic Mail
From: Margy M_redacted_ Msg#: 1043
To: Sysop
Re: ????????

Hi Steve, I'm still not sure I'm doing this write, and to be honest, it'll take me a while to get the hang of uploading, decompression etc. Can I stop by sometime next week and see what I'm doing wrong in message sending/forums etc.?
The bookstore has ordered in the software, and if the person picking it up can't find me so i can bring it down, they'll take it directly to you. What's the latest on the phone-jacking?
What I need to know, I guess, is a) do i have to save a message from here in editing to send it?; b)does the message need to be uploaded and if so which modem choice is best and on what should the choice be predicated?; c) if I just quit at this point, does the message go through?
I have more questions, but they'll keep(ahh the perils of being reared in a vax based environment….
thanks for listening
margy

Date: Friday, October 28, 1994 5:41pm Electronic Mail
From: Dave L_redacted_ Msg#: 1167
To: Sysop
Re: Thank You
(cc: of #1166)

Dennis, I am finally on line. I wish to thank you and your sysop for granting me priviledges on MRC,s Env. Science BBS. I just wish we had this back in 84′ when I was going to school there. It will take me a while to get used to using this system to the point of being comfortable and able to utilize it to be efficient so please be patient. In the meantime I will logon 2 times a week to read messages and to explore. Again a reminder I will stop in to MRC sometime on the 2nd of Nov to see you. Until then take care.
Regards, Dave./s

Date: Monday, October 31, 1994 6:20pm Electronic Mail
From: Mark B_redacted_ Msg#: 1270
To: Sysop
Re: << Return Receipt from Msg #1260 >>

Mark B_redacted_ has read your message #1260
that you wrote on 04-NOV-94 at 09:40.
Re: E1214MT.BNK LXR Test Bank

This return receipt was automatically generated,
as you had requested when you sent the message.

Date: Wednesday, December 7, 1994 2:05pm Electronic Mail
From: Michael L_redacted_ Msg#: 1624
To: Sysop
Re: Internet Access

Are students able to gain access to Internet?? If so, how do I go about getting it? Are their any cost involved?
Thanks for your help.
Michael _redacted_

Date: Tuesday, December 20, 1994 2:13pm Electronic Mail
From: Valerie H_redacted_ Msg#: 1801
To: Sysop
Re: Class Switch Notification
(Reply to #1800)

Thanks for signing me onto the world's premiere bulletin board service

Date: Tuesday, September 20, 1994 10:23pm Electronic Mail
From: Ray Sloan Msg#: 490
To: Sysop
Re: INTERNET INFORMATION REQUESTS
(Reply to #476, cc: of #474)

Sounds good, but how do students know what they are looking for and the vast potential of internet. I know that you are aware of some of the capabilities, but they may not. Perhaps we could entice them by providing documents relevant to course materials. For instance I will be discussing Mt. St. Helens and how ecosystems can recover (and rather quickly) from what appears to be a permanent catastrophe. In fact what was provided was a great ecological laboratory where old paradigms are being discarded for new and revolutionary ideas. Any possiblilty of finding current documents relating to vegetation recovery, mammal recovery, fish and other wildlife recovery, methods of investigation, or even workshop and classroom ideas relating to catastropy recovery and ecosystem dynamics.

One major problem may be that the students are faced with an information overload, and even if they have the files they may not read them. Anyway, I would. Do you want to try it???

Ray

Date: Thursday, December 22, 1994 8:18am Electronic Mail
From: Ray Sloan Msg#: 1826
To: Sysop
Re: New Menu Item

Steve:
Congratulations. Your evening credit item is absolutely supurbe. Terry will be most happy with this service. Now the number should go in all their advertising with our telnet address. Make it harder to pull the plug.

Date: Thursday, December 29, 1994 9:40am Electronic Mail
From: Ray Sloan Msg#: 1874

To: Sysop
Re: Birthday Boy

Thanks for the message Steve. A few days early but what the …

Your new menu format is excellent. I found it extremely easy to navigate through. I especially like the new twist of being able to jump to E-mail etc from the course areas. My own opinion is that we are at the top end of World Class BBSs. Will be hard for College to come up with a comparable model – also you are a moving target.

#1 4-JAN-1995 08:51:19.00
From: MTROYL::SSWETTENHAM “Steve”
To: RJ_redacted_
CC: SSWETTENHAM
Subj: CONSTRUCTING WEB PAGES

Dear Rick,

I would be happy to collaborate on developing WEB pages. I am interested in building a Graphical “Virtual College” with built in Quicktime. I am interested in developing the Introductory pages, including a detailed view of the Envioronmental Technology Program. I would also like to add on an online student handbook, and College directory. I believe the aforementioned elements are already common features of gopher sites. However, since gopher sites are “passe” (WWW is “in”) and our BBS support WWW, I would like to begin as soon as possible in producing a “virtual Faculty of Science and Technology”.

Regards,

Steve Swettenham

SciTech BBS First International Teleconference

Session

The following text archive is the first teleconference by an international login (United States) to the SciTech BBS on December 16, 1994:

Jason F_redacted_ just joined this channel!

:Hello there welcome to Mount Royal College

***

From Jason F_redacted_: Heya

:– Message sent —

:***

From Jason F_redacted_: Thanks for the switch

:Your Welcome, since you are the first person from the United States to join I thought you might be interested to see what we are about.

***

From Jason F_redacted_: This in Canada?

:– Message sent —

:Yes

:This BBS is designed for students and instructors as well as community

***

From Jason F_redacted_: I saw the address on Gcomm's /beta2 forum. I'm a

Major BBS sysop.

:– Message sent —

:Terrific, how's the ICO going so far?

***

From Jason F_redacted_: . I have ICO partially working Environmental BBS, isn't it?

:– Message sent —

:This was an environmental BBS but now is a Faculty wide BBS.

***

From Jason F_redacted_: Well, Having some lockup problems, but I think they may be cause by the fact that we don't have a non-dynamic SLIP yet….

:– Message sent —

:***

From Jason F_redacted_: May just forgo the SLIP and jump right to a 56k

:We are straight through, no in between stuff from VAX

***

From Jason F_redacted_: Eh… VAX… Ick.

:– Message sent —

:Well being a College we have main frame and micro mentalities – I prefer micro!

***

From Jason F_redacted_: I reduced it, but it's giving me a lot of Btrieve

errors… I've even got Bob Stein stumped…

:***

From Jason F_redacted_: Has something to do with not being able to write to a

file, but I have the file handles just about maxed

:– Message sent —

:***

:Are you coming in on ethernet?

***

From Jason F_redacted_: We have a VM system at my college… Penn State

---

University

:– Message sent —

:Do you have straight through service or is there some other computer system shovelling info

***

From Jason F_redacted_: Hmmm… I'm on a SLIP connection via a Modem from my

computer, so I'd hafta say no to that…

:– Message sent —

:Hmmm, we haven't had any problems yet via modem & ethernet, but I found that going through a VAX (local telnet) doen't permit us uploads.

***

From Jason F_redacted_: I believe it goes to a UNIX system which then connects to the Internet. When they go down, so do we…

:***

From Jason F_redacted_: been quite stable for a while now…

:***

From Jason F_redacted_: Well, if we can get the 56k line, we would be in much

better shape…. not to mention faster… currently, however, we

:***

From Jason F_redacted_: are fighting with the phone company about the

connection… they wanna charge $60 bucks more a month for a permanent

:***

From Jason F_redacted_: IP address when I could apply to internet and get one for free… (They sent me back to the phone company, but I got them after)

:***

From Jason F_redacted_: after the phone company now… hehehe..)

:***

From Jason F_redacted_: *laugh* yeah, lag is the big killer on the net… but

hey, what can you do? I'm thinking of changing to CSLIP

:***

:– Message sent —

:Well good luck.. If you have any ideas on how we can do better don't hesitate

***

From Jason F_redacted_: Oh, it's just a regular BBS business… pay for play type

deal…

:***

From Jason F_redacted_: 3 Gig of files, a ton of forums, tons of games, and

INTERNET!

:– Message sent —

:Sound great, let me know when you get the ICO up

***

From Jason F_redacted_: 6 lines now, although we have too many users on at once, so we're gonna expand very soon

:***

From Jason F_redacted_: no prob…

:– Message sent —

:Great, 28.8 or 14.4?

:***

From Jason F_redacted_: It's up now… I'm on via that, but we have no telnet

address or anything yet… (phone companys fault)

:Well when you get the ICO going I think you will enjoy the flex

***

From Jason F_redacted_: 14.4k now, but we’re gonna go to 28.8k

:– Message sent —

:Is 28.8K a standard now in the U.S.?

:***

From Jason F_redacted_: *nod* Can’t wait till we can get incoming telnet… and

get the WWW up…

:Haven’t tried WWW on our end but expect good results although Telnet seems best

***

From Jason F_redacted_: not really… although it’s catching on fast… only the

major boards have it, excluding stuff like AOL and prodigy…

:***

From Jason F_redacted_: AOL and Prodigy are still running at 2400 and 9600…

!!!!! (SLOOOOOOW!)

:Grass roots BBS still the best!!!!!!!!!

***

From Jason F_redacted_: you have the web up, right?

:– Message sent —

:Still working on fine tuning Web, but I have opened it up for now

***

From Jason F_redacted_: I’ll try it in a few minutes… I’m downloading netscape

right now

:***

From Jason F_redacted_: Grass Roots?

:***

From Jason F_redacted_: never heard of it

:***

From Jason F_redacted_:

:– Message sent —

:Well goto go its 1:30 a.m. here in Calgary, Alberta

***

From Jason F_redacted_: I'll check the WWW in about 2 minutes.. prolly sonner

:***

From Jason F_redacted_: sooner even

:– Message sent —

:***

From Jason F_redacted_: heh… 3:30 am here

:***

From Jason F_redacted_:

::) Thanks for the chat, Let me know how it goes, see ya on GCOMM

***

From Jason F_redacted_: gonna check WWW right now/// hang a sec…

:– Message sent —

:OK I hang for a sec!

:***

From Jason F_redacted_: yikes… 7 images? Wow!

:images of??? what?

***

From Jason F_redacted_: oh hehe… oops… wrong WWW page…

:– Message sent —

:***

From Jason F_redacted_: Heh… do you have any other pages besides the standard

Gcomm page?

:Not yet haven’t been real interested yet in WWW stuff, still dabbling with telnet

***

From Jason F_redacted_: All I have now is a thank you from gcomm for using ICO

:– Message sent —

:Well I’ll have to start working on that tomorrow, still skeptical that ICO will run perfectly.

***

From Jason F_redacted_: Kewl… WWW is the future, though.. much as I despise

it, but hey.. well, it works, though!

:***

From Jason F_redacted_: I’ll let ya get some sleep… I need some too!

:***

:Thanks very much, Cheers!

:***

From Jason F_redacted_: wave

:***

Jason F_redacted_ just exited the teleconference.

***

News

The following documentation is a collection of news reports about the SciTech BBS.

Science course info always accessible on the web

MRC News, February 19, 1998. Page 7

Nine hundred and seventy-eight people can’t be wrong. That’s how many students, instructors, industry, and global community users have current accounts with the SciTech ISP (Internet Service Provider), formerly the SciTech BBS (Bulletin Board System). What began with a conversation over coffee between Dennis Leask and Steve Swettenham on March 4, 1993, has now blossomed into a Web-based system providing a quick and convenient link between students and instructors in the Faculty of Science and Technology.

In its original form, users dialed up to the system via modem but now they’re also able to hook up through the Internet. The newest version of the SciTech ISP includes web BBS. Web browsers can interactively use secured accounts for e-mail, discussion groups, file libraries, and links to course-relevant Web sites. Students can access lecture notes, quizzes and assignments as well as send and receive e-mail messages anytime, anywhere whether from a computer station in the College or even from their homes. Student accounts are free and remain active as long as they want them, so they can continue to communicate with instructors and classmates long after they graduate.

Environmental Technology student Amin Kassam and instructor Dennis Leask check out the course information available through the SciTech Internet service provider.

Currently, there is material from eight courses on the SciTech ISP. Leask uses it to provide the latest information relating to his Environmental Technology courses from around the world to his students. While he doesn't include complete lectures, students are able to link to sites that expand on the material covered in class. "When we talk about the origin of the universe, they can get the 'Reader's Digest' condensed version from me and then get a much more detailed version on the Web from Steven Hawking," says Leask. It also saves students money. Instead of buying expensive textbooks or reports, they can download the material they need from the BBS. "Technology should reduce the cost of education for the student," he says. "If it increases the cost then you're going the wrong way."

"This is intended as an enhancement to classroom instruction, not a replacement," Swettenham says. "Instructors can be available to students 24 hours a day, seven days a week via the bulletin board. If students have questions, anytime of the day they can come in and pose those questions or search for information."

Don't expect the virtual classroom to make colleges and universities obsolete. "People still want to come to someplace to collaborate with their peers — it's human nature — the BBS just extends that communication beyond the walls of the College," says Swettenham. Check out the bulletin board for yourself at http://scitech.mtroyal.ab.ca

BBS offers information

MRC News, February 5, 1996. Page 3

Students with a computer and modem have the opportunity to access course information, schedules and e-mail through the SCITECH Bulletin Board System (BBS), operated by Steve Swettenham, Instructional Assistant, Lab Stores in the Faculty of Science and Technology.

In the computer world, his other title is SYSOP, or Systems Operator for the BBS.

“We started in 1993 and experimented with a Macintosh and PC version, but we eventually settled on the PC version,” he said. “We convinced companies in the United States to provide us with the software in order for the BBS to work as an extension of the classroom.”

Swettenham explained that the BBS has about 560 users, and numbers continue to grow since the system was opened in September 1994. The BBS is open 24 hours a day, seven days a week and logs about 1,000 calls a month.

It can be entered by any computer, regardless of its processing power. Students are presented with a full graphical interface with options that include forum, a public information centre, e-mail where students can send messages with attachments, software libraries, Internet utilities and a registry where students can talk to one another.

One of the more useful aspects of the system is the ability to download course descriptions and materials, from home. Most of the College’s Faculties are represented on the system, including a counselling forum where students can discuss counselling and career issues with College Counsellor Jack Dobbs.

“The course information is not available to the public, but other information about the College, including photos, ca be downloaded from the site,” Swettenham said.

Testing software offers multi-media exams

MRC News Brief, October 23, 1995. Vol 4, No.10.

Some Mount Royal College students are already discovering that, when it comes to exams, there are more choices than “essay” or “multiple choice.”

LXR Test is software that enables instructors to create test banks and generate tests that can include interactive components such as video and graphics, according to Steve Swettenham, Instructional Assistant in Lab Stores.

The College has a site license for the software, which means that any College instructor can have free access to LXR Test. Chemical, Biological and Environmental Sciences instructors began working with the software last year, and the Centre for Health Studies has started using it this year.

LXR Test was purchased by Chemical, Biological and Environmental Sciences faculty who contributed to the writing of an environment textbook last year. Part of the honorarium they received was used to purchase the software (the remainder was used to establish a scholarship fund).

Because the College has helped LXR test its software, Swettenham said LXR is providing free software updates directly from the company, and it has also allowed the College to purchase the professional scoring edition of LXR Test.

Workshops on using LXR Test are available. MRC instructors interested in using the software can call Swettenham at local 6164 or Fae Jackson in the Academic Development Centre, local 6041, for more information.

The Science and Technology BBS . . .

MRC News Brief. October 10, 1995. Vol. 4, No. 8

. . . has attracted the attention of one of the world's leading BBS software companies. Galacticom Inc. has designated MRC as a beta testing site, which means we'll be testing the newest and freshest BBS software before it goes to market for sale. Steve Swettenham, who keeps the BBS running and healthy, says the MRC bulletin board system attracts its share of international attention. Since the current software was installed in September 1994, the BBS has garnered more than 10,100 calls and an equal number of files have been downloaded. More than 400 students are registered to use the system.

Science and Tech eyes the Internet

MRC News, December 5, 1994. Vol. 11, No. 3; ISSN 0825-8600

The Faculty of Science and Technology is paving the way for electronic communication among Mount Royal College, its students and the world.

At present, the Faculty is testing a new "Internet module" on its computer bulletin board system (BBS), affording access to the global information highway.

According to Steve Swettenham, Instructional Assistant in Lab Stores and Assistant Manager, an Internet link is a logical evolution of the Faculty of Science and Technology BBS in its goal to supply instructors and students with information and a means of communicating locally and globally. What started as the Enviro BBS quickly caught on with members of related departments and has now become integral to the Faculty's operation, thanks to the collaborative vision of Bruce Horrey, Dennis Leask, Dr. Tom MacAlister, Ray Sloan and Dr. Gordon Williams. Instructors can make use of the system via the LAN or by the phone system using a modem.

The Faculty of Science and Technology BBS, like dozens of other BBSs in Calgary, can be reached by anyone with a computer, a modem and communication software. While other BBSs focus on entertainment or social exchange, the Science and Technology BBS is academic in nature, focusing on areas like environmental studies, chemistry, biology, aviation and computer science. By dialing 240-6785 or 240-6786 from their computers, community members can explore its most general levels. But the system's

real vision lies in student – instructor communication from anywhere in Calgary or the world, twenty-four hours a day, all year round.

“It’s an all-in-one package for e-mail, file transfer, teleconference as well as many on-line applications,” said Swettenham, who set up the system and operates it. Students can actually “upload” their assignments to an instructor’s account on the BBS from home, and can complete questionnaires or exams.

With the proposed Internet module on the BBS, the Faculty’s students will have access to the Internet and its wealth of scientific information. As well, the new module offers the potential of virtual toll-free access to the BBS, via “telnet’ on the Internet, from anywhere in the world.

Extending a portion of the College onto the Internet represents a bold step toward the future of education and its delivery, said Swettenham. The move is a deliberately cautious one. Co-operation within the College is central to the system’s feasibility, he said, involving input from Information Systems and the Academic Development Centre, for example. The success of the new module will depend upon the test results, technical realities and decisions about student use of MRC’s Internet link.

“It’s a new avenue we’re about to explore, one step at a time. The gradual development of the system maintains its integrity.”

Swettenham said the BBS provides his Faculty with ‘extended contact. Now we have community contact, and soon, world contact”.

Steve Swettenham runs … the Faculty of Science and Technology BBS using donated software called The Major BBS, a program chosen for its flexibility, ease of use and powerful capabilities afforded by a modular design, The BBS runs on a standard 486 PC (left) with a parallel system (right) used for education, development and backup. Two modems provide the off-campus link, allowing 20 individuals to use the system at once. The BBS also features “key test generating” software and self-contained electronic “books” to support student learning on the Internet.

Original article


Science and Tech eyes the Internet

PDF [4.6MB] 1994 MRC NEWS

Teaching Technology saves money

MRC News Brief, October 17, 1994. Vol. 3, No. 6

Chemical and Biological Sciences is using advanced technology for teaching and is saving Mount Royal College money in the process.

The Bulletin Board System (BBS) used by instructors Dennis Leask and Ray Sloan is so comprehensive, students don't even need to physically attend class. The BBS allows students computer access to course assignments, lecture notes and hassle-free contact with their instructors. It also gives them access to information resources worldwide – BBS can download graphics files from the Hubble Space Telescope and weather satellites monitoring Hurricane Emily.

A student from Edmonton enrolled in a course this semester downloads all of the in-class information to his home computer. "Supplemented by telephone conversations, facsimile transmissions and mailings, it's as though he were on campus," said Leask. This method of instruction has worked well in the past for students wishing to take classes from remote sites such as gas or chemical plants.

According to Leask, the BBS is "a cadillac, IBM-clone-based BBS" that is "improving technology in the College without putting us into bankruptcy" because it runs on systems "that were ready to be thrown out". The system also provides the opportunity to cut back on the amount of paper used for course handouts.

Of the approximately 200 students in the classes, more than 80 have active accounts and have logged more than 500 messages since the beginning of September.

Classes now trying E-mail

by Paul Coates, The Journal {MRC campus paper}, December 8, 1993. Page 5

Some day students may graduate without ever having attended a single class.

That is if they have a home computer equipped with a telephone modem.

Environmental Technology instructor Ray Sloan is using a computer bulletin board system, or BBS, this semester to deliver class notes to his students.

“It really makes teaching more productive,” Sloan said.

‘The bulletin board system saves student note taking. Students are able to think and discuss concepts in class.”

Students in three of Sloan’s courses can access the class notes and other information by phoning the college and hooking up their home computer to the BBS computer in the Biological Sciences Department.
This means a student can access the notes 24 hours a day, seven days a week.

The bulletin board system is like a giant electronic mail program. Students can get weekly class notes prepared by the instructor. They can see previous tests and exams. They can leave messages for the instructor, receive answers or chat with other system users.

First-year student Tammy Mather says she likes the BBS system.

“It’s convenient to log-on and download the class notes from home.”

“I keep the notes on a floppy disk and produce hard-copy notes that I can study from.”

“It’s more relevant to learning the subject in class. You’re not trying to frantically jot down notes.”
A student who does not have a home computer can get the notes on floppy disk or hard copy from Resource Island B.

About 10 to 15 per cent of Sloan’s students are taking advantage of the new system. Students can use any type of home computer to access the notes.

“BBS’s are the fastest growing areas in business for problem solving,” Dennis Leask, Biological Sciences instructor, said, “This is the first stage to a worldwide communications link.”

Sloan says that this type of system can open new areas of profit for Mount Royal in the areas of distance delivered education, information and seminars.

COLLEGE GOES HOME

Calgary Herald, Thursday, October 14, 1993. C3

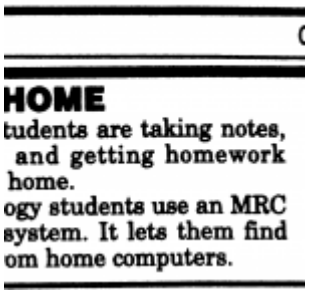
Mount Royal College students are taking notes, picking up assignments and getting homework help – all without leaving home.

Environmental technology students use an MRC computer bulletin board system. It lets them find information by phoning from home computers.

“It’s the wave of the future, an interactive way to deliver information,” says Ray Sloan, environmental technology instructor.

The system, in the chemical and biological sciences department, uses bulletin board software tailored by instructional assistant Steve Swettenham.

Original article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PDF [50 KB] Calgary Herald, Thursday, October 14, 1993. C3

College ET students phone Sloan

MRC News Brief, September 27, 1993. Vol. 2, No. 5

College Environmental Technology (ET) students are taking notes, picking up assignments and outlines, and getting help with problems all without leaving the comfort of their own homes – or, rather, their home computers.

MRC's Chemical and Biological Sciences Bulletin Board System (BBS) enables students taking Natural Science and Aquatic Biology courses to gain access to information by phoning from their home computers and downloading the files.

"It's the wave of the future – an interactive way to remotely deliver information," said Ray Sloan, ET instructor. "Not only can students access information, they can communicate on-line with instructors to solve problems."

The system uses IBM hardware and existing BBS software that was tailored by MRC instructional assistant Steve Swettenham.

"The possibilities are endless," Swettenham said. 'This type of system could mean increased access for long-distance users and the handicapped. For the future, we'd like a system that could be entered from anywhere in Canada."

Epilog

I have not found any online social network, content management system, or cloud service that has surpassed the autonomous digital communications functionality and minimal financial costs found in the Worldgroup BBS running on a basic PC. Had the UNIX version of Worldgroup BBS survived and migrated to Linux as an open source application, perhaps there could have been a future transition to an open source Internet BBS.

The SciTech BBS technology was moved off-campus and ran privately until 2004 when static IP addressing became financially prohibitive (another story with Canadian Radio-television and Telecommunications Commission allowing no pricing controls on major IP hosts over small static IP users).

Lessons learned from developing and employing a BBS for education are many, from the computing technology to educational politics. What terminated the SciTech BBS innovation was a combination of factors including an increasingly volatile politics and lack of faculty or student solidarity in sustaining an effective online learning service. No matter how much students and staff were engaged and believed the SciTech BBS to be a useful tool in the educational environ, if the administration did not support the project, then sustainability was tenuous, and the SciTech BBS advocates were forever paddling upstream.

Monday, December 9, 1996, I was invited to a lunch discussion with the President and a small group of staff to discuss our views on:

- how we would like to see the College develop over the next ten years
- how we could prepare ourselves for the 21st century learner
- what three things would we change at Mount Royal College

My response for change encompassed three things: people, incentives, and optimizing technology for the learner. Due to my feedback I was rewarded with an investigation into my "allegations" that was conducted by the vice-president, whereby all my colleagues were intensely interviewed. In 1997 the institutional report on my lunch feedback mysteriously vanished. However, from the aforementioned experiences I learned that there was no value in providing critical feedback to an institution fixated on process. In a different meeting where I was reprimanded for not understanding policy, I learned that intra institutional collaboration was only acceptable within certain policies that strictly controlled who could collaborate with whom in the institution. My impression is that the business of education with its accompanying politics ended our SciTech BBS innovation. By 1998 we were intensely attacked by the IT department as an irrelevant project that was a "security" issue for the institution.

Surviving founders of the SciTech BBS

Final photo of SciTech BBS Closure 1999-06-30 with Steve Swettenham at server

Final photo of SciTech BBS Closure 1999-06-30 with Dennis Leask, Instructor, Mount Royal College

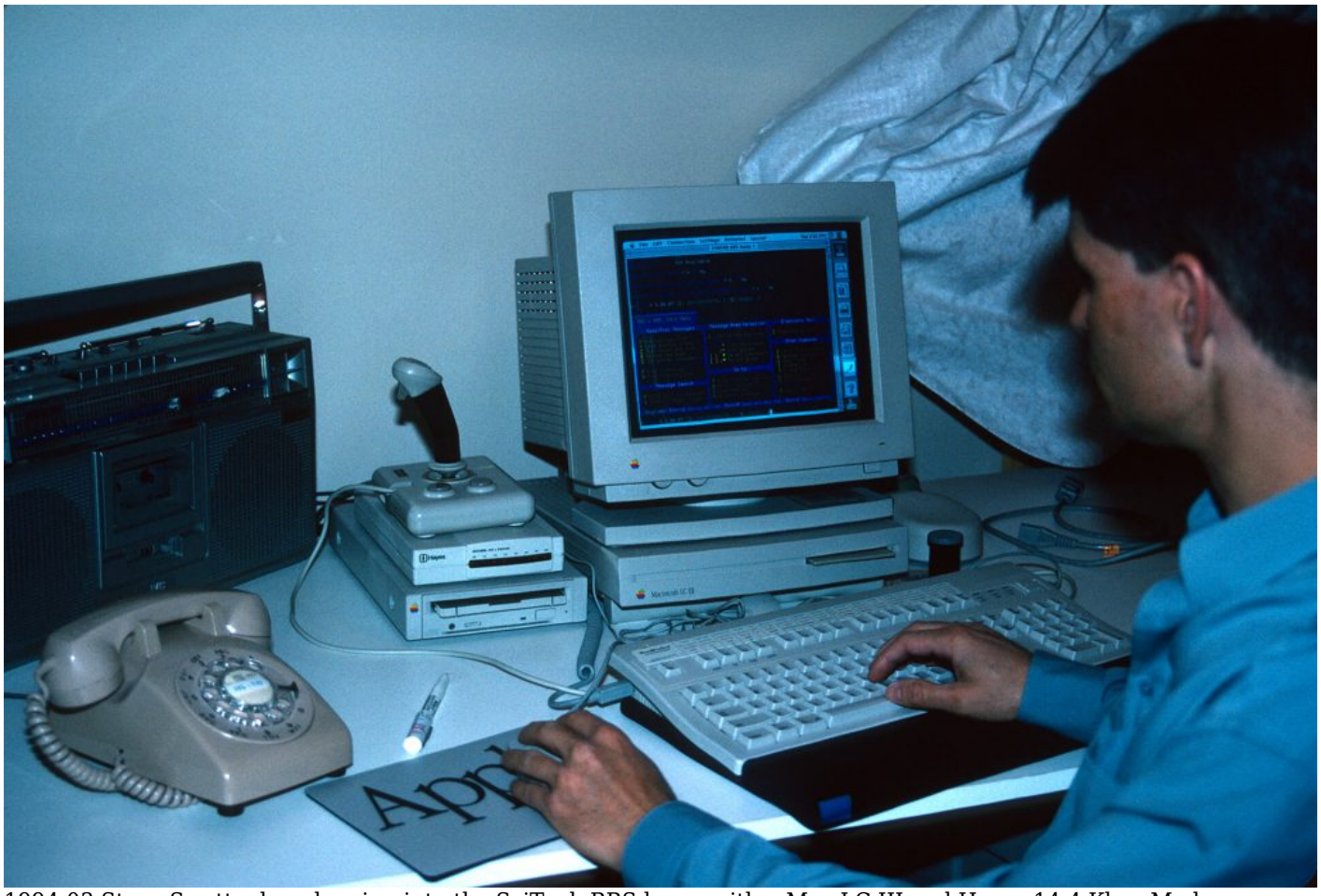
Mount Royal College - Office of the President Invitation December 2, 1996

June 24, 1996 Reprimand for violation of policy section 1025 page 2 paragraph 7 on collaboration initiatives within the institution

Email September 11, 1998 to Bruce Horrey

End

SciTech BBS 1993-1999 – Internet Educational BBS Pioneers of Alberta



1994-03 Steve Swettenham logging into the SciTech BBS home with a Mac LC III and Hayes 14.4 Kbps Modem