28 June 2004

TO: Susan Forman  
    VP Undergraduate Education

FROM: Gary A. Gigliotti  
      Director, TEC

RE: Annual Report for AY 2003-2004

ABSTRACT: This past year was the twelfth year of operations for the Teaching Excellence Center in New Brunswick. Our programs, and the projects we have funded or supported, have continued to have a meaningful and beneficial impact on teaching and scholarship at University. Our efforts were distributed over four general areas, which are listed below with representative activities for each:

A) Provision of resources to the faculty for the improvement of teaching:
   1. Support for and Development of Instructional Technology
   2. Participation in national conferences and activities concerning teaching and learning
   3. Special Programs: Office of Staff Training in Computer Literacy and Consulting
   4. Enhanced Classroom Support

B) Workshops, seminars and programs that provide fora for the discussion of issues pertinent to the improvement of teaching:
   1. Faculty Council Conference on Undergraduate Education
   2. Advisory Committee on Instructional Computing
   3. Workshops and seminars on faculty development.
   4. Support for Faculty Review of Deans in New Brunswick

C) Provision of resources and services that contribute to a comprehensive and meaningful evaluation of teaching to be used both for assessment and faculty development.
   1. Video-taping service for faculty
   2. Mid-course correction: classroom observation
   3. Responsibility for the distribution, scanning, and processing of the Student Instructional Rating Forms University-wide
   4. Development and design of teaching portfolios

D) Grant-funded activities:
   1. Mellon Foundation Cost Effective Uses of Technology in Teaching
   2. Rutgers Diversity Initiative: Bildner Family Foundation Grant
Description and scope of activities, programs and services:

The Teaching Excellence Center will complete its twelfth year of operation on 30 June 2004. Our activities and services fall into four broad categories: A) Provision of resources to the faculty for the improvement of teaching; B) Workshops, seminars and programs that provide fora for the discussion of issues pertinent to the improvement of teaching; C) Provision of resources and services that contribute to a comprehensive and meaningful evaluation of teaching to be used both for assessment and faculty development; D) Grant funded projects.

I.A. Provision of resources to the faculty for the improvement of teaching:

I.A.1 Instructional Technology Services and the New Media Development Laboratory

I.A.1.a Instructional Technology Specialist:

Joe Delaney, Associate Director for Information Technology, manages the New Media Development laboratory, the Student Multimedia Consultants and he designed and supports the teaching laboratory in the Kreeger Learning Resource Center and the teaching laboratory in Hill Center. Mr. Delaney has done a superb job. He insures that the New Media laboratory is functioning and fully staffed with student workers and projects. He has deftly coordinated the activities of the Student Consultants in support of the faculty, who have become increasingly dependent on the services of this student workforce. He and his student staff are the only real support for faculty using WebCT to create online components of campus courses, or full-blown online courses. He coordinated the continued development of the Digiclass course platform, which is used to enhance instruction in all languages taught in New Brunswick. In addition, he has offered a large number of workshops to faculty, staff and students, listed below.

Instructional Technologies

Continued the investigation of new tools that can be installed by any faculty on their RCI accounts for use in courses. Attended New Media Conference in New Media Conference in Vancouver June 16 – 20 to specifically explore new developments in these tools.

- Wiki software (open collaborative web pages) - [http://www.rci.rutgers.edu/~jpd/wakka/](http://www.rci.rutgers.edu/~jpd/wakka/)
- Blog software (student journals, portfolios) - [http://www.rci.rutgers.edu/~jpd/b2evolution/blogs/](http://www.rci.rutgers.edu/~jpd/b2evolution/blogs/)
- Templates for web design
- Hill 005 now function as a faculty lab where faculty can use our equipment independently of our student consultants, both for creating course materials and for familiarizing themselves with enhanced classroom operation such as ActivBoards and the PRS systems.

New projects

- Content management and template systems, in particular the system used by William and Mary <http://www.wm.edu/it/templates/>
- Personal Response Systems for use in large lecture courses.
- SIRS searchable database.

Instructional Technology Workshops: Joe Delaney offered the following workshops for faculty, graduate students and instructors:

Online Midcourse Survey users:
Jose Camacho, Spanish
Monica Devanas, Life Science
Nomel Francisco, Economics
Jane Grimshaw, Linguistics
Betsy Keller, Women's Studies
Kristin Dana, Electrical & Computer Engineering
John Lang, Sociology
Elaine Moore, Marketing
Angela ODonnell, GSE

Paul Panayotatos, Electrical & Computer Engineering
Jonathan Prince, Social Work
Kuang Sheng, Electrical & Computer Engineering
Barbara Stern, Marketing
Paul Takhistov, Food Science
Bruce Tesar, Linguistics
David Tulloch, Landscape Architecture
Scot Zola, Linguistics

Online Surveys for Special Projects:
Engineering Exit Interview
Engineering Alumni Interview
Philosophy Graduate Student survey
Writing Program
Bildner Courses Attitudes survey
Bloustein School Dean's Survey

I.A.1.b New Media Development Laboratory: The New Media Development Laboratory completed its seventh year of operation. The lab was used to support a wide variety of faculty projects, especially the design of web pages, WebCT courses, multi-media presentations and scanning and, in particular, supporting the Digiclass project for instruction in the languages. This latter project was initiated in the New Media Development Lab, with Year of the Network funding.

New Media Development Laboratory Consultations: Many instructors worked with Joe Delaney on an individual bases:

Blossom Birchenberg, Diversity Web site
Andrew Kirkman, Music
Nicole Smith/Larry Scanlon, English
David Chapman, Music
Corinne Delelio, Marine Science
Bob Wood, Camden (PRS)
Judy Stern, Psychology
Monica Bryant, Career Services
Matt Matsuda, History
Andrew Ruggiero, Libraries
Kathe Newman, Bloustein
Stefanie Zimmerman, Animal Science
Leslie Fishbein, American Studies
Angela Moody Robinson, Rutgers College
Yehuda Vardi, Jewish Studies
Erica Boling, GSE
Gary Merill, Biology
Peter Rona, Marine Science
Nancy Sinkoff, Jewish Studies/History
Ulrich Groetsch, History
Travis Russ, SCILS
Suzanne Armstrong-West, Douglass College
Eric Gilson, Camden Law Library
Morad Abousabe, Life Science

Digiclass: Expanded to second Digiclass server, now used by FAS Language Institute <http://fas-digiclass.rutgers.edu/>, Twenty-two languages are now using Digiclass through the Language Institute, including the Newark Arabic courses. School of Management and Labor Relations <http://smlr-digiclass.rutgers.edu/>

I.A.2. RU Teaching Fellows: The Teaching Excellence Center was unable to fund any Teaching Fellows in AY 2003-2004 due to budget concerns. We plan to re-institute this program next year.
Staff Technology Training at the TEC is continuing to evolve with the changing needs of the Rutgers staff community. From July 1, 2003 through June 30, 2004 we have served 1,248 Rutgers staff with 138 workshop offerings on 36 different topics at all levels. We kept up with University demand, even through a time of serious financial uncertainty which resulted in resulting in deep budget cuts. During this time period, we developed and offered 8 new “just in time” hands-on workshops based on the growing technology needs of Rutgers staff. These new workshops include: Excel: Charts and Pivot Tables, Special Topics in Word XP, Special Topics in Excel XP, New Features in Web CT, Introduction to New Features in Office XP, Intermediate and Advanced Outlook, and Special PowerPoint for Students. Basic Level workshops accounted for 59% of our total offerings (66% last year). Our Intermediate (32%) and Advanced level workshops (9%) are growing in number and are becoming more prominent as Rutgers staff becomes more tech-savvy.

During July 1, 2003 through June 30, 2004, 70 percent of TEC workshop offerings were open to the Rutgers community and 30 percent of TEC workshop offerings were special requests from both academic and administrative departments. Most of these special request workshops are tailored to the exact needs of the department, especially regarding upgrades to Microsoft Office XP, and the Macromedia web design suite. For example, the Bloustein School requested a series of special workshop to acquaint staff, faculty, and students with the new features of the Office XP series. Additional departments making special requests for workshops include: Animal Science, The Bloustein School, Criminal Justice, FIGS/Res Life, Health Policy, Humphrey Fellows, Jewish Studies, Libraries, OCDE, RUCS, & Student Accounting. Thirteen percent (18 in number) of the workshops we offered were special requests of the University Libraries. These are of special importance because they all were distance education workshops, tying together the New Brunswick libraries with both Camden and Newark.

The largest percentage of the workshops (28%) we offer concern Access database management at all levels. The demand for Access workshops has been consistently high, since more and more of the Rutgers community require the Access application to automate their offices and do their jobs. An increasing number of Access users are networking their databases within their departments. Special requests for more advanced Access workshops entail database administration and security issues. We can only develop and offer this degree of database training if adequately funded. Excel comes in second after Access with 20% of workshops offered, followed by PowerPoint (12%), Web Design (10%), and Word Processing (9%).

We estimate that 75% of all workshops during this timeframe were attended by staff, 10% by faculty, and 15% by students. The growth in student interest in TEC workshops from last year (5%) represents an interesting trend. Part of this trend includes students who wish to acquire the applications development skills required by the workplace; another part includes graduate students requiring either a database or spreadsheet structure in which to collect and analyze research data; another interesting portion of these students are non-IT majors who need the skills for their coursework, but cannot matriculate in the applicable for-credit courses.

Demand for TEC workshops and assistance continues to be high. In addition to scheduled workshops, we have been offering consultation and mentoring services to many various Rutgers departments on an as-needed basis, especially regarding the creation of Access databases for office automation. We found that this is a critical complement to our workshop offerings, since it provides follow-up and reassurance to new database developers who need to both comprehend a complex application quickly, and apply this understanding to the design of a workable database using their particular set of data within the Rutgers context. We have logged 220 special requests from about 60 different departments (both academic and administrative) from all three campuses during the past fiscal year. About 60% of these requests were for Access database assistance. Ten percent of requests were for special workshops. The remaining 30% of requests were for Word, Excel, Outlook, general Office, and Web Design help. Requests for assistance ranged from phone calls and e-mails to problem-solving appointments. Departments requesting consultation services of this office during FY 2003-2004 included: University Senate, English, Spanish and Portuguese, Psychology, Marine Biology, Chemistry, Life Sciences, Rutgers Libraries, Athletics, Purchasing, Student Accounting, Human Resources, the Language Institute, Comparative Lit, Economics, Engineering, Pharmacy, Raritan Review, the Bildner Center, Employee Relations, Old Queens, State Relations, Social Work, the Bloustein School, Political Science, EOF, FAS, TAP, African Studies, the Writing Program, History, RUCS, Student Accounting, OCDE, Facilities, and the Rutgers Foundation.
One burgeoning trend in the requests for TEC training, follow-up, and assistance is the development and upkeep of department web sites. Because more and more pressure is placed on secretarial, administrative, and student support staff to maintain websites, we are experiencing a huge increase in requests for assistance in this area. Technical changes to the RCI server had unforeseen consequences that were catastrophic to the novice web designer. We were called upon constantly to explain and fix these problems for the individuals taking our workshops. This resulted in much higher than average demand on our unit, already suffering from a nearly 30% drop in funding. Since we lost three staff in the past year to full-time positions with benefits (Sara Warner, Nellie Tsipoura, and Ajay Banerjee), we are rightfully concerned about future budget allocations and how they will impact the current staff with growing demand by the University population. In March of 2004, we organized a web design user’s group meeting to learn of both administrative and academic departments’ concerns about their web pages, their creation and maintenance. Twenty-nine staff responsible for web pages as well as representatives from RUCS and University Relations attended this meeting. As anticipated, the general response was a serious cry for help across all departments. We, as a unit, have been addressing these issues as they come up. However, with the technical changes at RCI impacting more and more department web sites, we will require adequate funding and staff just to keep up.

Our staffing breakdown is as follows:

**Staffing:**
- 1 full-time Director / Manager / Developer / Consultant / Instructor: Marcie Anszperger
- 1 part-time Administrative Assistant: Irene Ritz
- Joseph Delaney – TEC Instructional Technologies Specialist – provides periodic workshops for both faculty and staff, including Web CT, PhotoShop, PDF, E-Mail, Apple technologies, and Netscape
- 1 part-time trainer:
  - Mary Jo Watts: Web design, & web graphics
- The following trainers terminated employment in 2002-2003:
  - Sara Warner
  - Nellie Tsipoura
  - Ajay Banerjee

**General Workshop Statistics for 7/1/2003 – 6/30/2004:**
- Total number of workshops offered: 138
- Total number of workshop participants: 1,248
- Participation range for workshops: 1-23; most fall within 7-14 participants
- Number of new workshop offerings in 2003 – 2004: 8
- 36 different TEC workshop offerings:
  - 81 at the Basic level (59% of total)
  - 44 at the Intermediate level (32% of total)
  - 13 at the Advanced level (9% of total)
- Percent of workshops open to all staff: 70%
- Percent of workshops that are special requests: 30%
- Number of special requests for assistance: 220
  - Percent of those requests for Access help: 60%
  - Percent of those requests for special workshops: 10%
  - Percent of requests for general office assistance: 30%
Attached, please find my statistical breakdown of staff training for this period. In addition to general workshop statistics, I have included the following tables:

- Table 1: General Workshop Statistics
- Table 2: Workshop Offerings by Requestor
- Table 3: Workshops by Type
- Table 4: Workshops by Instructor

### Table 1: General Workshop Statistics

<table>
<thead>
<tr>
<th>Workshop</th>
<th># of Workshops</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access I: Basic, Tables</td>
<td>12</td>
<td>186</td>
</tr>
<tr>
<td>Access II: Queries, Forms, Reports</td>
<td>11</td>
<td>129</td>
</tr>
<tr>
<td>Access: Advanced - Relational Databases</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>Access: Intensive Forms Workshop</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Access: Intensive Queries Workshop</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Access: Intensive Reports Workshop</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Access: Intermediate</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>Access: Short Version</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>Dreamweaver MX: Basic</td>
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<td>66</td>
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<tr>
<td>Dreamweaver MX: Intermediate</td>
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<td>39</td>
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<tr>
<td>Excel: Basic</td>
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<td>154</td>
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<tr>
<td>Excel: Formulas &amp; Functions</td>
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<td>26</td>
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<tr>
<td>Excel: Intermediate</td>
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<td>68</td>
</tr>
<tr>
<td>Excel: Pivot Tables &amp; Charts</td>
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<td>9</td>
</tr>
<tr>
<td>Fireworks MX: Introduction</td>
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<td>13</td>
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<tr>
<td>Microsoft Publisher 2002</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>MS Word: Advanced</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>MS Word: Basic</td>
<td>4</td>
<td>40</td>
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<tr>
<td>MS Word: Desktop Publishing</td>
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<td>16</td>
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<tr>
<td>MS Word: Intermediate</td>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>MS Word: Special</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Office XP: New Tools</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Outlook I</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>Outlook II</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Outlook III</td>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td>Photoshop: Basic</td>
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<td>28</td>
</tr>
<tr>
<td>Pivot Tables: Excel and Access</td>
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<td>7</td>
</tr>
<tr>
<td>Placing Course Materials Online</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>PowerPoint: Basic</td>
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<td>67</td>
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<tr>
<td>PowerPoint: Intermediate</td>
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<td>19</td>
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<td>Video Conferencing: Introduction</td>
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<td>Web Site Maintenance - Macromedia Contribute</td>
<td>3</td>
<td>20</td>
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<tr>
<td>Web Surfing &amp; Practices</td>
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<td>15</td>
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<tr>
<td>WebCT: Introduction</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>Windows 2000 &amp; File Management</td>
<td>2</td>
<td>7</td>
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<tr>
<td>Windows XP &amp; File Management</td>
<td>1</td>
<td>15</td>
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</table>
### Table 2: Workshops by Requesting Department

<table>
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<tr>
<th>Requested by</th>
<th># of Workshops Requested</th>
<th>% of Workshops Requested</th>
<th>Enrollment</th>
<th>% of Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Science</td>
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<td>0.7%</td>
<td>9</td>
<td>0.7%</td>
</tr>
<tr>
<td>Bloustein</td>
<td>1</td>
<td>0.7%</td>
<td>16</td>
<td>1.3%</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>1</td>
<td>0.7%</td>
<td>10</td>
<td>0.8%</td>
</tr>
<tr>
<td>FIGS/Res Life</td>
<td>3</td>
<td>2.2%</td>
<td>10</td>
<td>0.8%</td>
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<td>Health Policy</td>
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<td>0.7%</td>
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<td>0.9%</td>
</tr>
<tr>
<td>Humphrey Fellows</td>
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<td>1.4%</td>
<td>17</td>
<td>1.4%</td>
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<td>Jewish Studies</td>
<td>1</td>
<td>0.7%</td>
<td>4</td>
<td>0.3%</td>
</tr>
<tr>
<td>Libraries</td>
<td>18</td>
<td>13.0%</td>
<td>174</td>
<td>13.9%</td>
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<td>OCDE</td>
<td>2</td>
<td>1.4%</td>
<td>30</td>
<td>2.4%</td>
</tr>
<tr>
<td>Open</td>
<td>97</td>
<td>70.3%</td>
<td>848</td>
<td>67.9%</td>
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<td>RUCS</td>
<td>6</td>
<td>4.3%</td>
<td>38</td>
<td>3.0%</td>
</tr>
<tr>
<td>Student Accounting</td>
<td>5</td>
<td>3.6%</td>
<td>81</td>
<td>6.5%</td>
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<tr>
<td><strong>Grand Total</strong></td>
<td><strong>138</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>1,248</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

### Table 3: Workshops by Type

<table>
<thead>
<tr>
<th>Type</th>
<th>Workshop</th>
<th># of Workshops</th>
<th>% of Workshops</th>
<th>% of Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Tools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Placing Course Materials Online</td>
<td>3</td>
<td>2.2%</td>
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</tr>
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<td></td>
<td>WebCT: Introduction</td>
<td>5</td>
<td>3.6%</td>
<td></td>
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<tr>
<td><strong>Course Tools Total</strong></td>
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<td><strong>5.8%</strong></td>
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<tr>
<td><strong>Database Management</strong></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Access I: Basic, Tables</td>
<td>12</td>
<td>8.7%</td>
<td></td>
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<tr>
<td></td>
<td>Access II: Queries, Forms, Reports</td>
<td>11</td>
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<td></td>
<td>Access: Advanced - Relational Databases</td>
<td>3</td>
<td>2.2%</td>
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<td></td>
<td>Access: Intensive Forms Workshop</td>
<td>1</td>
<td>0.7%</td>
<td></td>
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<tr>
<td></td>
<td>Access: Intensive Queries Workshop</td>
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<td>2.2%</td>
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<tr>
<td></td>
<td>Access: Intensive Reports Workshop</td>
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<td>0.7%</td>
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<tr>
<td></td>
<td>Access: Intermediate</td>
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<td>2.2%</td>
<td></td>
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<tr>
<td></td>
<td>Access: Short Version</td>
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<td>2.9%</td>
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<tr>
<td><strong>Database Management Total</strong></td>
<td></td>
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<td><strong>27.5%</strong></td>
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<tr>
<td><strong>Desktop Publishing</strong></td>
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<tr>
<td></td>
<td>Microsoft Publisher 2002</td>
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<td>0.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MS Word: Desktop Publishing</td>
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<td><strong>Desktop Publishing Total</strong></td>
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<td><strong>2.2%</strong></td>
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<tr>
<td>Category</td>
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<td>Count</td>
<td>Percentage</td>
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<td>------------------------</td>
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<td></td>
</tr>
<tr>
<td><strong>Internet and E-Mail</strong></td>
<td>Web Surfing &amp; Practices</td>
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<td>0.7%</td>
<td></td>
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<td><strong>Internet and E-Mail Total</strong></td>
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<td>0.7%</td>
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<td><strong>Office Applications</strong></td>
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<td><strong>Office Applications Total</strong></td>
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<td>0.7%</td>
<td></td>
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<tr>
<td><strong>Outlook</strong></td>
<td>Outlook I</td>
<td>2</td>
<td>1.4%</td>
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<tr>
<td></td>
<td>Outlook II</td>
<td>1</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outlook III</td>
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<tr>
<td><strong>Outlook Total</strong></td>
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<tr>
<td><strong>PowerPoint</strong></td>
<td>PowerPoint: Basic</td>
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<tr>
<td></td>
<td>PowerPoint: Intermediate</td>
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<td>2.2%</td>
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</tr>
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<td><strong>PowerPoint Total</strong></td>
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<td><strong>Spreadsheet Analysis</strong></td>
<td>Excel: Basic</td>
<td>14</td>
<td>10.1%</td>
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</tr>
<tr>
<td></td>
<td>Excel: Formulas &amp; Functions</td>
<td>3</td>
<td>2.2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excel: Intermediate</td>
<td>9</td>
<td>6.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excel: Pivot Tables &amp; Charts</td>
<td>1</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pivot Tables: Excel and Access</td>
<td>1</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Spreadsheet Analysis Total</strong></td>
<td></td>
<td>28</td>
<td>20.3%</td>
<td></td>
</tr>
<tr>
<td><strong>Web Design</strong></td>
<td>Dreamweaver MX: Basic</td>
<td>6</td>
<td>4.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dreamweaver MX: Intermediate</td>
<td>5</td>
<td>3.6%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Web Site Maintenance - Macromedia</td>
<td>3</td>
<td>2.2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contribute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Web Design Total</strong></td>
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<td>14</td>
<td>10.1%</td>
<td></td>
</tr>
<tr>
<td><strong>Web Graphics</strong></td>
<td>Fireworks MX: Introduction</td>
<td>2</td>
<td>1.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Photoshop: Basic</td>
<td>5</td>
<td>3.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Web Graphics Total</strong></td>
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<td>7</td>
<td>5.1%</td>
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<tr>
<td><strong>Web Video</strong></td>
<td>Video Conferencing: Introduction</td>
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<tr>
<td><strong>Web Video Total</strong></td>
<td></td>
<td>1</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Windows</strong></td>
<td>Windows 2000 &amp; File Management</td>
<td>2</td>
<td>1.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Windows XP &amp; File Management</td>
<td>1</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Windows Total</strong></td>
<td></td>
<td>3</td>
<td>2.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Word Processing</strong></td>
<td>MS Word: Advanced</td>
<td>2</td>
<td>1.4%</td>
<td></td>
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<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
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<tr>
<td>MS Word: Basic</td>
<td>4</td>
<td>2.9%</td>
</tr>
<tr>
<td>MS Word: Intermediate</td>
<td>5</td>
<td>3.6%</td>
</tr>
<tr>
<td>MS Word: Special</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td><strong>Word Processing Total</strong></td>
<td><strong>13</strong></td>
<td><strong>9.4%</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>138</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
Table 4: Workshops by Instructor

<table>
<thead>
<tr>
<th>Instructor</th>
<th># of Workshops by Instructor</th>
<th>% of Total by Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Banerjee</td>
<td>8</td>
<td>6%</td>
</tr>
<tr>
<td>J. Delaney</td>
<td>10</td>
<td>7%</td>
</tr>
<tr>
<td>M. Anszperger</td>
<td>80</td>
<td>58%</td>
</tr>
<tr>
<td>M. Watts</td>
<td>19</td>
<td>14%</td>
</tr>
<tr>
<td>N. Tsipoura</td>
<td>9</td>
<td>7%</td>
</tr>
<tr>
<td>S. Warner</td>
<td>12</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>138</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
I.A.3. Invited Presentations by Dr. Monica Devanas for faculty development and the improvement of teaching and learning.

July 11, 2003
"Teaching Portfolios for Language Teachers"
World Language Summer Institute
FAS Language Lab

August 1-4, 2002
AAC&U SENCER Summer Institute
National Model Developer
"Biomedical Issues of HIV/AIDS"
"Making the Case for SENCER"
"Faculty Portfolios"
"Planning and Teaching A SENCER Course"
SENCER Plenary Presentation

http://aacu-edu.org/sencer/index.html
Santa Clara University

September 26, 2003
"Keep Vitality in Teaching and Scholarship"
Purdue University - Calumette Campus
Faculty Development Day
Calumette, IN

November 8, 2003
"SENCER: Linking Science Education and Civic Engagement for Effective Student Learning"
Project Kalidescope Regional Meeting
New York University
New York, NY

April 15-16, 2004
Administrative Portfolio Conference
Peter Seldin Team
Baldwin-Wallace College
Berea, OH

May 13, 2004
Technology Training for Teachers K-16+
New Brunswick Tomorrow
Education Committee
New Brunswick, NJ

May 26, 2004
"Using HIV/AIDS Content to Foster Learning Communities and Undergraduate Research"
Co-Convener for Division Symposium
"Using Microbiology to Teach Students about Science and modern Life"
American Society for Microbiology General Meeting
New Orleans, LA

June 6-10, 2004
Teaching PortfolioWorkshop
Peter Seldin Team
Our Lady of the Lake University
San Antonio, TX
I.A.5 Enhanced Classroom Support.

EVP Furmanski requested that we prepare a comprehensive document outlining the accomplishments of ECS in the past year and a comprehensive plan for the stable funding and future development of Instructional Technology in New Brunswick.

I.A.5.a Current Status of Enhanced Classroom Support in New Brunswick

The Enhanced Classroom Support Office, a division of the Teaching Excellence Center, manages the technologically enhanced classrooms on the New Brunswick/Piscataway campus. All of the 237 classrooms under the control of the Office of Scheduling and Space Management are equipped with an overhead projector and projection screen, and this equipment is the responsibility of Enhanced Classroom Support. But, the technologically enhanced classrooms, or ‘smart’ classrooms, contain additional equipment, much of which was originally funded under the Higher Education Facilities Trust. The purpose of this initial funding was to make it possible to project video, play audio tracks and show documents in the large lecture halls. The demand for these tools by faculty was substantial and the number of enhanced classrooms was expanded in an attempt to meet it.

AY 2003-2004, the following number of enhanced classrooms are in operation. Also the online registration system was enhanced to provide e-mail confirmations of the equipment requests and improve communication with faculty.

**Fully enhanced:** Secure podium, touch screen control system updated in all rooms, video/data projector, internet connection, laserdisc or dvd player, vcr, document camera, some with personal response system, some with slide projector, some with film projector)

22 large lecture halls
34 medium sized rooms

**Enhanced with video projection or display:**
17 medium sized rooms with dvd and vcr and older video projectors
50 smaller rooms with dvd, vcr and monitors

All 237 rooms in New Brunswick/Piscataway have an overhead projector and screen regardless of other enhancements.

The Enhanced Classroom Support Office is responsible for installing all equipment in the enhanced classrooms, maintaining it, trouble shooting it, and training and assisting the faculty members using it. ECS has a small but very effective staff that does an exemplary job. There are 3.5 full time lines in ECS, with a total annual salary of $148,300;

Manager: Matt Wilk
Head A/V Technician: Wayne Hungridge
Head A/V Technician: Don Weber
Unit Coordinator (1/2 time): Ramona Ziminski

In addition, the ECS receives annually $150,000 to support wages of labor for part time employees, and $50,000 for maintenance and repair expenses for the equipment in the classrooms. The part time labor force is tiered, with four part time supervisors who help manage the 30 student workers.

The headquarters of ECS is located in the Livingston Theater on the Livingston Campus, but ECS operates annex locations, often as small as a large closet, on the local campuses to facilitate the delivery of equipment and repairs. ECS also operates the Faculty Learning Facility in Hill 005, which contains the same equipment found in the enhanced classrooms. Faculty can visit and test out or practice using any of the equipment. The Facility also contains a networked teaching lab, used for faculty and staff training, and a wireless portable computer lab which can be used anywhere with an available network feed.

Because of the large and increasing demand for the ability to show images in the classroom, ECS operates a delivery service to bring vcr’s and projectors to the classroom.

As an illustration, the table below shows the number of deliveries made to various classroom locations from each ECS Annex during the Fall 2003 term.
When the enhanced classrooms were first developed, the large lecture halls were equipped first, to serve the largest number of students. But, many of the faculty members whose classes were located in smaller classrooms had as much or more use for projection than the instructors in the large lecture halls, especially in courses with heavy use of video tapes or filmed images transferred to video. The most delivered equipment for Fall 2003 is shown below:

- Video projector with vcr: 288 deliveries
- 35 mm slide projectors: 45 deliveries
- CD/audio player: 32 deliveries
- Laptop projectors: 17 deliveries

As one can see, video projectors with a vcr were the most delivered item. But, the demand for video/data projectors that could support projection from a laptop computer, such as a power point presentation, is severely understated. Only 17 such deliveries were made, but, the demand was in the hundreds. ECS does not have a large inventory of these expensive items, and, sometimes will not deliver the ones we do have because of security concerns. Thus, many instructors are frustrated in their desire to use power point presentations and other laptop computer presentations in the classroom.

Data from our touch screen systems in the fully enhanced classrooms confirm this. The software that runs the touch screens records which devices are used during a class. Over the Fall 2003 term, our data show 5133 recorded uses of a laptop with data projector, 2077 recorded uses of the vcr, and 20 uses of a video slide projector in the large lecture halls. (Detailed comparisons are available in an appendix.)

Thus, we are often unable to meet requests for the very equipment and services the faculty are now demanding, including laptop computers, video/data projectors for use with a laptop, internet access, and dvd players. Recently, we’ve received an increasing number of requests for connecting a Personal Digital Assistant (PDA) digital camcorder. We’ve been able to help in the former case, but our classrooms are currently unable to support connection to a digital camcorder.

**Telephone Support:** Besides making direct visits to the classroom on request, or delivering equipment to ill-equipped classrooms, ECS handles a large volume of telephone calls. The table below shows two types of support. Telephone Support refers to calls coming into ECS headquarters, and include requests for equipment and problems in the classroom. Technician Support refers to the trips made by our two technicians upon request of the headquarters office to campus locations to facilitate repairs.

<table>
<thead>
<tr>
<th>Campus/College</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livingston</td>
<td>181</td>
</tr>
<tr>
<td>College Ave.</td>
<td>133</td>
</tr>
<tr>
<td>College Ave.</td>
<td>110</td>
</tr>
<tr>
<td>Douglass</td>
<td>104</td>
</tr>
<tr>
<td>Busch</td>
<td>23</td>
</tr>
<tr>
<td>Cook</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<td>Douglass</td>
<td>104</td>
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<tr>
<td>Busch</td>
<td>23</td>
</tr>
<tr>
<td>Cook</td>
<td>13</td>
</tr>
</tbody>
</table>

**Telephone Support:**

<table>
<thead>
<tr>
<th>Average number of phone calls per day</th>
<th>Per semester:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22.5</td>
</tr>
<tr>
<td></td>
<td>1,350</td>
</tr>
</tbody>
</table>

**Technician Support field calls from HQ:**

<table>
<thead>
<tr>
<th>Average number of trip per day</th>
<th>Average per semester: (60 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5</td>
<td>270</td>
</tr>
</tbody>
</table>

*Note – these do not reflect students’ responses to rooms initiated from tech desk*
The majority of telephone support calls fall into the following categories:

1. **User error:** User is not familiar with system, or is doing something wrong (i.e. not pressing the touch screen, not familiar with image toggling steps to project in classroom)
2. **Incompatibility of laptop with system:** New technology and video cards are more advanced than that of equipment in some of the classrooms with monitors installed. *This is an increasing problem that we need to address.*
3. **Classroom not set up with proper equipment for needs.** Faculty members are scheduled in rooms that do not meet their equipment needs, particularly lack of a dvd player in classrooms.
4. **Internet problems:** System down, laptop not set up with proper settings.
5. **Environmental problems:** Classroom too hot; too cold; lights out; water dripping from ceiling
6. **Routine maintenance:** Lamp blown in overhead projector, wireless batteries dead, etc.
7. **Major equipment malfunction:** Lamp blown in data projector, touch screen reporting problem with system, major item broken or damaged.

The first category, user error, is by far the most frequent reason for a telephone call for assistance. The second, incompatibility of laptops with projection systems, is a growing hardware problem and can only be resolved by updating older projection equipment and keeping up with the change in laptop and PDA capabilities. The third category is our major infrastructure problem, the lack of equipment where the faculty members need it.

Categories 4 and 5 are not the responsibility of ECS; internet problems are handled by RUCS, and environmental problems are handled by Facilities. ECS works closely with both of these units to handle these concerns, especially through the two major coordinating committees, the Instructional Technology Faculty Support Committee, chaired by Professor Gigliotti, and the Facilities Maintenance Committee, chaired by Dean Beals. Our dependence on other these other RU departments does delay response time. For example, internet connectivity issues need to be checked by our technicians and then reported to RUCS. This can take anywhere from a few minutes to a few days before a problem is diagnosed and corrected.

The final two categories, routine maintenance and major equipment malfunctions, are unavoidable problems, but make up the smallest portion of the telephone calls for assistance ECS receives. We have made a great deal of progress in the past two years in minimizing these kinds of problems, but as equipment ages, their incidence increases.

Our technicians, talking the faculty member through troubleshooting steps over the telephone, can rectify half of the phone calls ECS receives. Many faculty members do not attend any training sessions for using the equipment in the enhanced classrooms, and learn as they go by calling ECS for help. The challenge is keeping the faculty member on the line long enough to trouble shoot the situation. Some faculty members, trained or not, have little patience for assisting in this effort, and end the conversation quickly, forcing us to send a student or technician to assist them.

If our staff is not able to trouble shoot the problem over the phone, we will send out one of our student workers in the field to respond. If the student is not responding to another call, or in the middle of a delivery, response time is usually 3-7 minutes, depending on classroom location. In the event that the problem is beyond the scope of our students, one of our two technicians will be dispatched to the room as soon as possible, generally by next period. In situations where there is a major malfunction (lamp blown in data projector or broken piece of equipment) we are limited as to when we can get into the classroom, due to the heavy usage schedule.

**Other types of instructional technology now available:**

It’s important to state at the out set that the most important and ubiquitous instructional technology available is the University network and the email and web pages made possible because of it. Email is often taken for granted, but it is one of the most powerful tools for instruction we have. Web pages for courses and research activities are critical to instruction, in making information easily available at any time or place. But neither of these two tools would have much use if we did not have a fast reliable network behind them. For the purposes of this document, the technical reality of these two tools is taken for granted.

Below, the other major instructional technologies are described. For the moment, the pedagogical programs offered by the TEC that assist faculty in making these tools worthwhile for instruction are not discussed.
List servs: Class email lists are readily available for all courses on campus via the online roster web site, https://www.acs.rutgers.edu:8887/rosters/. Any instructor who wishes to, can create a list serv for his or her class quickly and easily. Such lists are a critical method of communication between instructor and students, and among students themselves.

Course platforms: There are four course platforms available to instructors in New Brunswick. All of them provide a web presence for a course, but most of them offer more sophisticated learning tools, such as online testing, discussion forums, mailing lists, and student web pages, and security features, such as secure grade posting and testing. These platforms are listed in descending order of the volume of use in New Brunswick.

  Webct: Webct is the most sophisticated course platform that is widely available in New Brunswick. (https://webct.rutgers.edu). RUCS operates a server and devotes 1/2 of a staff position to maintaining it. Instructors from all over the University use this server; there are over 500 courses operating in the WebCt environment. The TEC provides all training and support for faculty users, and offers workshops on WebCt use. WebCt is a powerful tool, but many find it hard to use.

  Digiclass: Digiclass was created by the Teaching Excellence Center as a course platform that is easy to use and maintain for any interested instructor and students. It’s ease of use and automated features make it very successful as a reference and teaching tool. It was adopted by the language departments in FAS-New Brunswick and is used in the School of Management and Labor Relations. It is available to any instructor in New Brunswick, and runs on a server at the TEC. http://digiclass.rutgers.edu

  ECompanion: ECompanion is offered through the Office of Continuous Education and Outreach. It’s penetration into the ‘on-campus’ environment has not been significant as of yet, but, it is being marketed aggressively by the OCEO. Faculty who have seen it find it easy to use, so new users may adopt it.

  Blackboard: Blackboard is a major competitor nationally of WebCt, and has been widely adopted at many Universities. As compared to WebCt, it is easier for novices to learn to use, but, in the past, it has not been as powerful as WebCt, but that situation is constantly in flux. The Newark campus has adopted the ‘enterprise’ version of Blackboard, which will automatically create a Blackboard course-site for every course offered on that campus.

Networked Teaching Labs: There is a large and growing demand for networked teaching labs. RUCS runs Instructional Microcomputer Laboratories (IML), which offer a server and a group of machines networked together that are used by faculty for instruction. These facilities are funded to a considerable degree through the Student Computer Fee. The IML are partnered with the general access labs open to students for private educational use. In New Brunswick, these funds are allocated through the Academic Computing Advisory Committee.

  Much of the available time for using the IML are taken up by the computer science department, especially for Computer Science 110, the basic introductory course in the discipline. Complete information for these labs can be found at: http://nbcs.rutgers.edu/services/instruction/index.php

  Streaming video: This tool has had limited use, but a number of offices have the capability to stream video, including RUTV, the TEC, RUCS and the Library. Though there have been experiments in streaming courses in real time, and then storing the files for later review by students, there has been little real effort put forward in this area.

  Video Conferencing: There are various video conferencing tools available on campus. The Office of Continuous Education and Outreach operates ‘distance learning’ facilities, which allow video connections between appropriately equipped classrooms on various sites across the University and beyond. The University Libraries also have video conferencing facilities like this, which are used for training purposes among other things, but not usually for instruction. Small scale conferencing tools are also available, but mostly used by faculty for research conferences.

  Video and Film: The Library provides an abundance of video and film to faculty members who request it for use in their courses. This is usually delivered by DVD and VHS tape, and film, and can be displayed with a DVD player or computer, or a VCR. At present, there is no 35mm film capabilities that are available for instruction on campus.

  Slide projection: Some of the Enhanced Classrooms have slide projectors of various kinds. The slides themselves come from an array of sources, including the University Library System, departmental image libraries, private faculty collections.

Online Tutoring: The Learning Centers have developed an online tutoring system at a student’s request.
Video taped instruction: The TEC videotapes instructors who request the service. The tape is given to the instructor, with comments from Dr. Devanas of the TEC. This is purely for review. Videotapes used for instruction are mostly taped presentations by teaching assistants reviewing problems and topics in science classes, notably Physics and Chemistry. Many of these tapes are viewed in the Math and Science Learning Center. Over the years, these tapes of TA instruction have been produced by various sources. Most recently, the Learning Centers have created a number of taped presentations, notably for the Chemistry department, that assist students learning problem-solving skills.

Departmental Computer Labs and Teaching Software: Many departments in New Brunswick have created their own instructional computer laboratories, using specialized software for instruction in upper level courses. Some, notably Geography, have networked computer environments that serve students throughout their departmental curriculum. Others, notably the Writing Program, are focused on entering undergraduate students. There is no comprehensive inventory of these facilities, but, many of these labs were funded through the Advisory Committee on Instructional Computing, using Student Computing Fee dollars, and there is a record of them.

I. A. 5. b. Technology Needed for Instruction: The instructional technology needed by faculty and students today runs the gamut, from projection in classrooms to connectivity outside class.

I.A.5.b.1. Video/data projection in all teaching spaces. All classrooms and teaching spaces in the University should be equipped with video/data projection that can be driven by computer, vcr, dvd player or other devices. Some of these rooms require “active media” such as write-on tablets and white boards that permit the display and storage of material written out in real time in the lecture hall or classroom.

I.A.5.b.2. The university network and web infrastructure: A fast and reliable university network is the basic infrastructure for research and teaching and administration in the university. All classrooms and lecture halls should have an internet connection, either wireless or broadband. At present, 62 classrooms in New Brunswick have internet connections.

I.A.5.b.3. Personal Response Systems: The personal response systems have been installed in 11 lecture halls. (10 have the same system, with ARC 103 having a different system.) They have been well received by students and faculty alike. All lecture halls and large classrooms should have these very cost effective systems installed.

I.A.5.b.4. Film Projection: Five rooms have 16mm film projectors, three of these maintained by ECS. These are critically important for classes heavily dependent on film, such as Cinema Studies. But, no lecture halls or classrooms have 35mm film projection. This is severely limiting to the film studies discipline, and at least one such facility is necessary.

I.A.5.b.5. Scanning Center: Though inexpensive image scanners are widely available, high speed scanners that convert film slides, and staff to support them, would be highly beneficial in many departments. Art History has been scanning slides for years, attempting to make their slide collection available in digital format, but it is a time intensive process. In addition, faculty would benefit greatly from a scanning service for test scoring. Though the TEC has a small scanner for this purpose, and so do many departments, a Scanning Center which offered scoring and analysis of exams would be very beneficial to the faculty and students alike.

I.A.5.b.6. Networked teaching environments: There is a pent up demand for networked teaching environments, like the ones contained in the RUCS Instructional Microcomputer Labs, the TEC training labs, and at the Alexander Library. Some departments have created their own, but, more such teaching spaces are needed. These can be created by dedicating lab space, running wiring, and so forth, or, by using new wireless portable labs, like the one the TEC uses in the Faculty Learning Facility in the Hill Center.

I.A.5.b.7. Wireless connectivity: Wireless connections to the University network can convert almost any space on campus into an enhanced classroom facility or networked environment. Student centers, seminar spaces, and classrooms themselves can have online material readily available either though the instructor’s computer or the
laptops and pda’s that students carry. The advantages of this type of connectivity are just beginning to be made evident. We need to move forward in this area quickly, to keep standards current and to involve all instructors and students.

I.A.5.b.8. Web based course platform: Though we have four course platforms available, as described above, support for these tools is not adequate. The Newark campus has conformed to the Blackboard system, and it is expected that their support costs will be bounded because of this standardization. Faculty need to have a reliable course platform, both for instruction and for security purposes and online testing. If we cannot support more than one such tool adequately, then we should standardize on one in New Brunswick, or, let each academic unit create their own.

I.A.5.b.9. Streaming video on demand and video conferencing: We have just begun to explore the uses of these tools. It would be very helpful if a serious investment was made in the development and maintenance of useful streaming services. At least one central university facility, whether RUCS or the Library or some other unit, should have the resources to maintain and support streaming services for New Brunswick. Otherwise, this tool will remain severely underutilized. Similarly, video conferencing tools should be widely available and well support.

I.A.5.b.10. Text chats. bulletin boards, blogs and wikis: Text-based communications tools allow instructors to hold online office hours, which can be very efficient and useful. There are a wide variety of them, with chats and bulletin boards supported within the course platforms. Newer tools, like blogs and wikis, have considerable use, but are not well supported. This is a growth area and must be funded adequately.

I.A.5.c. An Adequate Support System for Instruction: The TEC’s role in this area is primarily through the Enhanced Classroom Support Office. No matter how quickly we implement online services, streaming video and conferencing, the bulk of the University’s teaching and learning will occur in University teaching spaces and classrooms. Therefore, these rooms must have adequate equipment, as stated above, and must be supported appropriately to keep downtime at a minimum. In addition, ECS must have the resources to plan strategically for the development of future classroom configurations, rather than acting only when capital budget opportunities present themselves. We have been running ECS in ‘crisis mode’ since the inception of the enhanced classrooms, and that mode of operation is wasteful, inefficient and disruptive to the needs of the faculty and the student body.

I.A.5.c.1. Structure of Enhanced Classroom Support Office: To provide the kind of ubiquitous projection and appropriate deployment of in-class instructional tools, the following restructuring of ECS is needed.

I.A.5.c.1.a. Restructuring of staffing and operations:

As is happening throughout the world economy, unskilled labor is being replaced by a combination of fewer but highly skilled and well-paid staff working with the latest information technologies. This trend is inevitable, given the flow of technology into the economy over the last 20 years. Well-trained workers are needed to understand, support, maintain and use the new tools. In our case, we must move from our current reliance on temporary student type 4 and type 5 labor to provide adequate service for instructional technology throughout the University.

In the case of ECS, over $170,000 is spent annually on student labor. Such heavy reliance is cost prohibitive and ineffective. We are continually training new students each year. The student turnover, unreliability and loss of experienced trouble-shooters damages our success rate in providing adequate classroom facilities. With permanent well-trained staff, we can increase reliability, shorten response time and conduct increased preventive maintenance on our equipment. We would limit student labor hours to a few hours a day to assisting our staff with classroom openings and closings during the start and end of classes.

In order to increase our faculty support and our presence in the classrooms, we propose dividing the New Brunswick campuses into 4 zones. Each zone will have a full time technician/supervisor providing coverage during 7:30 AM – 10:30 PM, the typical class day:
The creation of these Zone Supervisors will improve the quality and quantity of response to classroom problems. Immediate crisis repairs will be possible. Routine maintenance and repair can be planned and conducted during open periods. More significant and thorough faculty training can be supported, and specialized needs of the faculty, such as video streaming, portable labs and taping services, can be supported in real time.

In addition, the creation of the Zone Supervisors and their staff will provide trained, skilled labor for other uses, such as slide scanning, tape duplication, multimedia assistance and production. In the end, we see the Supervisors assisting in the creation of various ‘learning objects’ that can be used on the University network or in the enhanced classrooms and instructional computer labs.

Below, we outline the Zones of Operation for ECS:

<table>
<thead>
<tr>
<th>Zone</th>
<th>Total number of rooms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1 - College Avenue/Downtown:</td>
<td>59</td>
</tr>
<tr>
<td>Consisting of all classrooms and lecture halls located on the College Avenue Campus. Include support for the three river dorm classroom buildings: Frelinghuysen, Hardenberg &amp; Campbell. Location would require office space to house equipment and technical support personnel, preferably in Murray or Scott buildings to provide better support response. Current annex location is in the Vorhees classroom foyer (our previous office was taken to become the Zimmerli museum café). Line positions: 2 Full time</td>
<td></td>
</tr>
<tr>
<td>Zone 2 - Cook/Douglas Campuses:</td>
<td>54</td>
</tr>
<tr>
<td>Consisting of all classrooms and lecture halls located on the Cook College and Douglass College campuses. One vehicle would be assigned to this campus to take care of emergency and service calls. Campus already has adequate office space. Line positions: 2 Full time</td>
<td></td>
</tr>
<tr>
<td>Zone 3 - Livingston Campus:</td>
<td>42</td>
</tr>
<tr>
<td>Consisting of all classrooms and lecture halls located on the Livingston College campus. Full time personnel would have the added responsibilities of handling the Technical Support Hotline, training students and faculty and dispatching assistance in the field, which is critical for the operation of our department. Our current spacing situation allows for adequate space for staff, however, additional space is needed for equipment storage. Line positions: 2 Full time</td>
<td></td>
</tr>
<tr>
<td>Zone 4 - Busch Campus:</td>
<td>27</td>
</tr>
<tr>
<td>Consisting of all classrooms and lecture halls located on the Busch Campus in Piscataway. Full time position will also provide faculty and course development support for the TEC FIDL located in Hill 005. Position would also serve as our Laptop Specialist. Line positions: 1 Full Time 1 10-month (this person will work Tuesday-Saturday and perform maintenance on all campuses Saturdays when classrooms are empty)</td>
<td></td>
</tr>
</tbody>
</table>
Enhanced Classroom Support is currently staffed with the 3.5 full time lines:

1. Manager Range 24 57,500
2. Full time head technician - Range 16 step 3 34,800
3. Full time head technician - Range 16 step 7 40,500
0.5 Administrative Assistant – Range 13 step 4 16,000

3.5 Full Lines Total salary: 148,300

In order to accommodate this level of support in Phase 1, we suggest that full time line levels be increased by a total of 7 1/2 fulltime lines to a total of 11 fulltime staff and one 10-month position to be designated as follows*.

1. Manager Range 25 58,000 (1 step increase)
2. Administrative Assistant Range 12 27,000
3. Head Operations Supervisors - Range 18 41,000 (Existing Head tech; 1 step increase)
4. Head Operations Supervisors Range 18 36,000 (Existing Head tech; 1 step increase)
7. Area Supervisors Range 13 7x 27,000 189,000
1. Area Supervisor, Range 13 - 10 month 22,500

12 Full lines Total Estimated wage bill: 432,500

* Salary levels and ranges need to be adjusted by UHR for competitiveness. All positions to report to Director of Instructional Technology at TEC. Actual ranges pending UHR approval. Position of Busch area supervisor may be increased due to reflect technical computer experience.

2. Restructured Student Staffing: (if above staffing changes made)

Currently during the Fall and Spring terms we have 14.5 hours per campus of coverage Monday-Thursday, 9.5 hours per campus on Friday and 5 hours on Saturday, plus 8 hours at 3 other locations 5 days a week.

14.5 x 5 x 4= 290 (ARC, ECS, Tillet, Vorhees, Frelinghuysen)
9.5 x 5 x 1 = 47.5 (Fridays, same locations as above)
5 x 1 x 1 = 5 (vorhees, Saturday)
8 x 3 x 5 = 120 (weekdays, hickman, Loree, Ruth Adams)

This gives 462.5 hours per week per semester of student coverage during Fall and Spring terms. This represents a cut of 152 hours in student labor from AY 2002-2003, which was replaced with type 4 employees (4 x 38 hours per week) this past year. In our new structure, the type fours would become the full time lines as discussed above. If this change is made, then, our requirement for student labor would be:

Reduced student staffing to assist in opening and closing rooms
3 hours mornings, CAC, Loree, Ruth Adams, Livingston, 5 days (3 x 4 x 5 = 60)
3 hours evenings, 4 locations 5 days for closing (3 x 4 x 5 = 60)
6 hours days, 2 locations for 4 days (6 x 2 x 4 = 48)

Total 168 student hours per week per semester instead of 462.5 per week per semester.

No summer hours for student labor would be necessary, though 1 or 2 students would be hired for Christmas week of Winter Session.
I.A.5.c.1.b. Funding for equipment replacement in enhanced classrooms: We desperately need a budget that allows us to plan strategically for obsolescence, and replacement, and maintenance. We suggest a six year cycle of equipment replacement for all enhanced classrooms. The cost to replace all equipment in all enhanced classrooms now in operation would be approximately $1.2 million. Therefore, over a six-year cycle, we would need approximately $200,000 per year to upgrade and replace all equipment in the current enhanced classrooms. If the number of enhanced classrooms is expanded, we would need proportionally more funds per year.

I.A.5.d. ENHANCED CLASSROOM SUPPORT: A Plan of Action

The staffing and equipment plan outlined above is comprehensive and necessary, but costly, and will take time to implement. Our plan of action works through campus priorities and needs step by step.

I.A.5.d.1 Immediate Action:

I.A.5.d.1.a. Staff: Given the coming Route 18 construction project, it would be best to convert some staff positions to full time as soon as possible to provide a stable labor force for the enhanced classrooms.

- Raise Manager position from Range 24 to Range 25: **Incremental cost, $500/year**
- Raise Head Technicians from Range 16 to Range 18: **Incremental cost, $1700/year**
- Convert four type four positions to full time staff positions, Area Supervisors, 2 Cook/Douglass, 1 CAC/Downtown, and 1 Busch/Livingston: Range 13 @$27,000 each. Since these four positions would replace four type four positions, which currently earn approximately $24,000 per year, for an **Incremental cost of $3000 per position**, net of benefits.
- Shift student labor to Cook/Douglass to facilitate installations and operations on that campus during the transition to new scheduling and new enhanced classroom availability, as discussed below.

I.A.5.d.1.b. Equipment: Our need for a second vehicle is imperative with the coming Route 18 construction. We would like to purchase a van for use on the other three campuses, and use our current Escort wagon exclusively on Cook/Douglass. A number of classrooms on Cook/Douglass need immediate upgrades, including a number of rooms that have no equipment at present and are a focus of our delivery efforts on that campus. The sound system in the Scott lecture halls has failed and has been jury-rigged to function temporarily.

- Purchase of new vehicle: **Cost: $25,000**
- Upgrade all current equipment in the following classrooms: Art History 100 and 200, Ruth Adams 206, Bio 205, Chemistry 106.
- Add equipment to these currently unequipped classrooms to avoid delivery time and expense: Ruth Adams 104, Hickman 126 and 216, Food Science 109.

**Cost: $144,000 (Full cost presented in attached spreadsheets)**

- Upgrade the program sound system in 18 lecture halls: **Cost: $72,000**
  The audio equipment in the lecture halls is breaking down and has reached the end of its life cycle. A majority of the amplifiers, mixers and feedback eliminators have been in constant use since their installation in 1994. As such, we are experiencing an increase in periodic failures throughout the campuses. The program audio in Scott 123 and 135 have already failed, and are jury-rigged for the remainder of the term. There are no funds available for any preventive maintenance of the 18 largest lecture halls. We need to upgrade and replace at a minimum the amplifiers and mixers in these lecture halls. Estimated cost per room for equipment is $4,000. **NOTE:** This dollar amount number **does not** include any work on updating or replacing permanently mounted speakers or overhauling the voice sound system.
- Engineering B120: **Cost: $40,000 - 50,000**
The Classroom Maintenance committee has committed funds for the asbestos removal in ENG B120 during summer 2004. Work has already begun during this past Spring Break. The classroom will also get a complete renovation with lighting, audio and new walls treatments. This classroom has not been upgraded to an enhanced classroom, and does not meet the needs of the faculty. The cost to upgrade this room to make it compatible to similar Rutgers’ lecture halls was originally quoted at $50,000 (6/2003), however, we would like to revisit this classroom and get a new quote to meet our revised long term plan of action. Our budget does not have the financial resources to cover such an upgrade, nor has funding been secured from the Maintenance Committee.

- Portable equipment for Cook/Douglass: Portable video projector for delivery in Hickman office video projector, cart, vcr, speaker) **Cost: $6,000**
- Emergency Lecture Hall equipment: To ensure the smooth operation of the enhanced lecture halls, equipment that can be brought in to replace damaged or failed equipment is extremely valuable. A complete lecture hall configuration for the Cook/Douglass campus includes: Sony VPL 40 data projector $7,000  
  Crestron AV 2  
  Touch screen  
  Crest audio amplifier  
  TOA Stereo mixer  
  TAO A912 Voice amp  
  **Cost:** 19,500

I.A.5.d.2. **Short Run Actions:** These actions should be completed over the next two academic years.

I.A.5.d.2.a. **Staff:** Create additional Area Supervisor positions in lieu of student labor and type 4 labor.

For Busch/Livingston campus, Two Area Supervisors, Range 13 @$27,000

One Area Supervisor, Range 13, 10 month @$22,500

For CAC/Downtown: One Area Supervisor, Range 13 @$27,000

Though total salary cost of these lines is $76,500/year, a portion of these funds will be countered by reduced use of type 4 and student wages of labor funds, as described above. The amount of the offset will depend on how quickly new full time positions are created, reduction of deliveries by new equipment installations, and so forth. **Therefore, the incremental salary cost of these position will be approximately $3000-$4000 per position.**

I.A.5.d.2.b. **Equipment:** There are currently 8 enhanced classrooms that still have 36” monitors installed: ARC 203, MU 111, MU 113, BE 221 and LSH B205. These monitors are rapidly becoming outdated as laptops have become more technologically advanced. Recent projector upgrades in SC 201, 202, 121 and 221 have been successful. It is recommended that the monitors in these classrooms be removed and upgraded with ceiling mounted video projectors. Cost per room would be $16,500.00. Classrooms would also be updated with Crestron Room View capabilities.

Replace 36” Monitors with LCD data projectors: **Cost: $132,000**

I.A.5.d.3. **Long Run Actions:** The costs of these recommendations, especially the equipment needs, are is hard to determine, since they will occur farther in the future.

I.A.5.d.3.a. **Staff:** Complete staff adjust by upgrading part time administrator to Administrative Assistant, Range 12 @$27,000/year. **Incremental Cost:** $9000/year
I.A.5.d.3.b. Equipment: Upgrade all current classrooms with Crestron Room View system control, and create additional enhanced classrooms:

- **Existing rooms:** All existing podia with Crestron AV2 system control processors will need to be upgraded over the long range. This will permit us to monitor the equipment in each enhanced classroom, and facilitate repairs, remotely, saving considerably in long run labor costs. The cost of each CNSMX AV2 would be $1,600.00. By adding an estimated wiring installation labor charge of $1,000 per room, we arrive at a cost of $2,600 per room (not including labor). We currently have this unit installed in only 2 classrooms and would require the purchase of 58 more of these units for a cost of 150,800. The installation would take place in a number of phases, following the tentative schedule below.

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
<th>Classrooms</th>
<th>Installation Phase</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room updates</td>
<td>5</td>
<td>ARC 203, MU 111, MU 113, BE 221 and LSH B205</td>
<td>Phase 1</td>
<td></td>
</tr>
<tr>
<td>Hickman</td>
<td>5</td>
<td>HCK 101, 138, 205, 210, 214</td>
<td>Phase 2</td>
<td></td>
</tr>
<tr>
<td>Beck</td>
<td>8</td>
<td>BECK AUD, 253, 252, 251, 250, 219, 213, 201</td>
<td>Phase 3</td>
<td></td>
</tr>
<tr>
<td>LIV.</td>
<td>4</td>
<td>LSH AUD, TIL 116, B267, B269</td>
<td>Phase 4</td>
<td></td>
</tr>
<tr>
<td>College Ave.</td>
<td>9</td>
<td>VOR 105, SCOTT 123, 135, 221, 202, 101, 121, VD 211, MI 100</td>
<td>Phase 5</td>
<td></td>
</tr>
<tr>
<td>Murray</td>
<td>6</td>
<td>MU 210, 211, 212, 213, 301, 302</td>
<td>Phase 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Remaining rooms to be assigned</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crestron Room View 4.0 program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Cost: To be determined</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Creation of additional Crestron Room View classrooms:** One of the challenges facing the University is creating an adequate number of mid-sized classrooms (seating 80 – 120 people) that have permanent multimedia projection equipment. The Crestron system has a push button input switching and can handle data, VCR and dvd projection and falls in line with our overall plan. 10 hi-priority rooms should be considered.

I.A.5.e. Conclusion: Strategic planning and the institutional infrastructure of enhanced classroom support: Even if funds are made available as requested above, the development of new enhanced classroom, the implementation of new technologies and the training in the use of these new tools, must be coordinated with strong faculty support. We believe it best that ECS continue to report to the Teaching Excellence Center. But, we also believe a Strategic Planning Committee for the Enhanced Classrooms, chaired by a faculty member and reporting to an officer in the Office of Academic Affairs, should be created to help oversee the future development of the enhanced classrooms. This committee should have a large faculty representation, with the representatives being users of the enhanced equipment, and, representatives from the various academic deans offices, to help set the course for the teaching development the deans wish to support. There should also be representation from RUCS, the Library, Facilities, Scheduling and other administrative offices that directly support the classrooms.
The Committee’s role would be to act as the anticipator of pedagogical innovation over a long horizon. It would meet regularly to discuss new developments, and long run needs of the campus in instructional technology. It’s goal would be to stabilize the development of teaching spaces on campus, and to ensure that the teaching spaces we now have are kept up to par for students and faculty alike.

For example, it is our view that we should press forward immediately to make EVERY classroom on campus controlled by Scheduling and Space Management into an basic enhanced classroom, containing video/data projection, vcr/dvd, and an internet connection, following the plan of action described above. ALL classrooms, no matter what their capacity, need to have the tools faculty use every day. Going forward with this initiative is the kind of thing a Strategic Planning committee would help with a great deal. Other issues such a committee could address are:

- Installation of wireless connectivity in classrooms:
- Implementation of new technologies, such as Active Boards and Panels, Personal Response systems, ‘cable free’ connectivity for faculty to interface the enhanced equipment, supporting PDA’s in teaching, and the like.
- Implementation of streaming video services, answering questions such as who should support this service, how available should it be, and so on.
- Provision of Course Platforms: At present, as mentioned above, there are four course platforms available in the University. We need to decide whether we should follow the Newark campus, and conform on one system, or, allow each school or department to do as they like.
- Provision of networked teaching spaces: At present, the only generally available networked teaching spaces are the Instructional Micro-computing Laboratories operated by RUCS, though many departments have their own labs. The committee would be useful in assisting in the planning of how such facilities are to be made available in the future, either through departments or for general use.
- Usefulness of university network and web applications. The committee could provide valuable feedback about the usefulness and design of online rosters, online grading, online test taking. It would also provide valuable input into the usefulness of University web pages for teaching and for learning, and for the usefulness of the University computing facilities in general for student use, such as availability of storage, services provided through the student portal, etc.
- Scanning: The committee could discuss the advisability of creating a scanning center for scanning slides, documents, and for supporting the grading and analysis of examinations given by the faculty.

I.B.1. Faculty Council Conference on Undergraduate Education

President McCormick and EVP Furmanski have begun a major review of undergraduate education in New Brunswick. The Faculty Council Conference was a “kick-off” of the effort among the faculty. The special focus for this Conference on October 3, 2003 was “The First Two Years.” President McCormick was the keynote speaker and cautioned the faculty that four things must always be kept in mind when considering change in the University: 1) Our Students; 2) Our Faculty; 3) Our Structure; and 4) Our Budget. Taking this to heart, the participants began and intense discussion that has blossomed all year long. EVP Furmanski has provided forum for contintued disucsiion throught the “Task Force ” he has created.

I. B.2. Advisory Committee on Instructional Computing: The ACIC was chaired by Professor Angela O’Donnell for AY 2003-2004. Professor Gigliotti served as member, and chaired the group A subcommittee and once again the TEC supported the committee’s work by providing secured server space for collection and distribution of the proposals. Though the committee again reviewed proposal from RUCS, the Library and a number of academic departments, there was much discussion of the future course and usefulness of the committee itself. The committee recommended the funding of a number of departmental projects, it recommended that funds be distributed differently next year with special effort made to fund some innovative projects instead of funding replacements. EVP Furmanski is considering these suggestions.
I.B.3 Activities and Presentations by Dr. Devanas Supporting Faculty Development:

August 28, 2003
Learning Styles and Teaching Science Workshop
Teaching Assistant Orientation

September 17, 2003
"Instructional Technology Tools and Workshops"
Rutgers College Peer Mentors

October 3, 2003
Faculty Conference on Undergraduate Education
Coordinated sessions, speakers, operations

October 10, 2003
Faculty Instructional Development Lab Open House
Instructional Technologies for Teaching
Hill Center

October 20, 2003
“Teaching Portfolio Workshop”
Rutgers Business School - Newark
Ph.D. in Management Graduate Student and Mentors

November 14, 2003
"Five Hot Buttons for Teaching"
Air Force Detachment Cadre
Rutgers Air Force ROTC

February 6, 2004
"Learning Styles and Teaching Strategies"
Chemical Engineering and Ceramic and Materials
Engineering Departments
Graduate Student Teaching Assistants

February 10, 2004
Co-Hosted “Conversations on Teaching”
- with The Graduate School
With Jenny Mandelbaum, SCILS
For Graduate Students and Faculty

February 20, 2004
"Five Hot Buttons for Teaching"
Chemical Engineering and Ceramic and Materials
Engineering Departments
Graduate Student Teaching Assistants

March 10, 2004
"Technology and Teaching"
Graduate School Course on "College Teaching"
Graduate Students

March 24, 2004
"Teaching Portfolios"
"Assessment and Teaching"
Graduate School Course on "College Teaching"
Graduate Students

May 5, 2004
“Demonstrations and Discussions of Student Response Devices”
Conference for Faculty
Co-hosted with Bill Sofer, Waksman Institute

May 19, 2004
“Teaching Initiatives for Research Programs”
ORSP sponsored workshop for NSF Career Awards
Rutgers Diversity Initiative, Bildner Teaching Fellows
Summer Institute

I.B.4 Faculty Review of Deans in New Brunswick:

On April 27, 2001, the University Senate passed a resolution recommending that each decanal unit in the University create a performance review process for the Dean that would include faculty, staff and students. The Teaching Excellence Center offered its assistance to all Deans, and created an online evaluation tool that decanal units could use as they wished. Since that time, the following units and deans have consulted with Dr. Devanas: The School of Communications, Information and Library Studies, The Ernest Mario School of Pharmacy, the School of Engineering, Livingston College, Rutgers College, the Edward J. Bloustein School of Public Planning and Policy.

This year the Faculty Affairs and Personnel Committee conducted a comprehensive review of the process of faculty review of the deans and requested Dr. Devanas to consult with them and attend meetings of the committee to provide background context for the details of the process.

Overview of the Faculty Review of Dean Procedure in place for 2003-2004:
The University Senate charge to the faculty is to define a process for conducting this evaluation within the parameters established by the Senate in a manner that is helpful to the unit and the Dean, and then to carry out that process.
The Senate identifies five areas within which deans are to be evaluated. The primary issues for consideration will be the Dean’s:

- Quality of relationship with and care for students
- Quality of collegial relationship between the Dean and faculty/fellows
- Performance in personnel issues relative to faculty and staff
- Performance on financial and strategic management of the unit’s resources
- Overall performance

These issues are addressed to varying extents and with varying degrees of specificity, as relevant to different groups who participate in the evaluation, faculty, staff, students and others. In all cases, the Dean prepared a document for distribution to people whose feedback was asked, describing the job responsibilities as he/she sees it; a statement of his/her major achievements, including the Dean’s self-assessment of his/her activities and accomplishments in relation to the five areas identified by the Senate; his/her long- and short-term goals and objectives. In each case the faculty committee sent the specific plans for the process to the Dean and University Vice President Seneca for approval. Dr. Devanas assisted the faculty committees with the organization of the process, the online and paper surveys, meeting with focus groups, collecting letters, preparing reports of surveys and focus groups.

This process has taken considerable time and resources of both Dr. Devanas and Joseph Delaney, and student staff of the TEC.

The Revised Faculty Review of the Dean Procedure to be implemented in 2004-2005 will provide for a creation of a university faculty committee that will conduct the review process. See http://senate.rutgers.edu/032604se.html, http://senate.rutgers.edu/fapadminevalreview.html http://senate.rutgers.edu/rlmackadministratorsevaluationreview.html

I.C. Provision of Resources for an effective evaluation and assessment of teaching:

I.C.1. Video-Taping Service: As in previous years, the TEC operates a videotaping service for faculty interested in observing themselves the way students see them.

I.C.2. Mid-Course Corrections: Dr. Devanas again conducted mid-course evaluations for a number of faculty. The mid-course correction intervention is a non-evaluative, whole-class interviewing technique. Typically the process is conducted at or before the mid-point mark in a semester, hence "mid-course". The purpose of the method is to strengthen student feedback and communication about the student's perspective of the course. The "correction" component addresses the intent of incorporating student feedback for enhancing the course and improving teaching.

The entire process begins with a dialogue between the course instructor and a faculty colleague trained as a facilitator. The object of this first meeting is to describe the process and schedule a date for the intervention. Secondly, at the time of the process, the course instructor introduces the facilitator and leaves the class. About 30 minutes are required for the procedure. The facilitator explains the procedure, emphasizing that the students' comments will directly affect the remainder of the course and will be given only to the instructor as anonymous comments and suggestions.

The class is then divided into small groups, a student chosen as group recorder, and the following questions addressed:

1. What do you like about the course?
2. What do you think needs improvement?
3. What suggestions do you have for bringing about these improvements?

After about ten minutes, each group reports on the discussion and consensus in their group. The facilitator records the consensus comments and asks for clarification when needed. Next, the facilitator debriefs the course instructor on the student's comments and examines options for change. At the next class meeting the course instructor opens the class with a summary of the class' comments, shares reactions to the comments and discusses possible changes. A follow-up conversation between the course instructor and faculty facilitator is useful to measure the effectiveness and outcomes of the intervention.
I.C.2. Online Mid-Course Correction: The TEC offers an online version of the mid course evaluation which any instructor can use. The mid course survey was modified this year to be fully automated. Instructors who wish to use it fill out a web form <http://teachx.rutgers.edu:8080/midcourse/admin/createSurvey.jsp>, the survey is created immediately and results are automatically compiled and e-mailed back to them on the date that they choose. Students in the course are given a window of opportunity to answer the three basic questions given above. The data is processed so that the students remain anonymous, and the results are sent via email to the instructor for review. In Ay 2003-2004 the service was extensively used. Most of the people who used it did so for more than one course. The Writing Program is adopting the service to track their students and the use of various resources provided online. Other users included:

Jose Camacho, Spanish
Monica Devanas, Life Science
Nomel Francisco, Economics
Jane Grimshaw, Linguistics
Betsy Keller, Women's Studies
Kristin Dana, Electrical & Computer Engineering
John Lang, Sociology
Elaine Moore, Marketing
Angela O'Donnell, GSE
Paul Panayotatos, Electrical & Computer Engineering
Jonathan Prince, Social Work
Kuang Sheng, Electrical & Computer Engineering
Barbara Stern, Marketing

Paul Takhistov, Food Science
Bruce Tesar, Linguistics
David Tulloch, Landscape Architecture
Scot Zola, Linguistics

I.C.4. Distribution and Processing of the Student Instructional Rating Forms:
The Student Instructional Rating System has completed its eleventh year of full operation under the control of the Teaching Excellence Center in New Brunswick. We have been able to continually improve the operation and accuracy of the evaluation system, by investing in computer hardware, and software, and by developing in-house expertise in the management of the evaluation system. The TEC was fortunate in Ay 03-04, in that we received additional funding of $30,000 from the Office of Academic Affairs to support wages of labor costs for the distribution and processing of the Student Instructional Rating Forms.

Overview of the Student Instructional Rating System:

Scope: The Teaching Excellence Center in New Brunswick is responsible for the distribution and processing of the Student Instructional Rating forms for the entire University. We distribute approximately 150,000 rating forms in the Fall and Spring, to the three major University campuses. We return the completed forms and results to the faculty within five weeks of the end of the term. We are a twelve-month operation; in the Summer Session, we distribute and process approximately 25,000 forms for New Brunswick, Camden and Newark campuses, and have all completed forms and results returned before school begins in the Fall.

Special forms: Besides distributing the standard Student Instructional Rating Form, we also assist interested departments and deans offices in the design and use of special forms targeted to their specific needs; there are twenty difference versions of departmental forms. In all but two instances, the departments add their own special questions to the blank spaces provided on the forms.

New Brunswick
English, FAS
Physics [five separate forms], FAS
Spanish and Portuguese, FAS
Writing Program, FAS
Visual Arts, MGSA
GSAPP
Cooperative Extension
CASE
Music [4 separate forms], MGSA
SCILS
Rutgers Business School
Electrical and Computer Engineering, SOE

Newark
Computer Science, FASN
Economics, FASN
Geological Science, FASN
Mathematics, FASN
Rutgers Business School

Special processing: The Teaching Excellence Center prepares a number of special reports for deans' offices. These reports are extremely time-consuming to prepare, since they are each unique, suiting the needs of the
deans in question. In addition, an increasing number of deans are asking that all the summary statistics sheets for all instructors in their units each term be sent to the dean's office. The following dean's offices currently receive special reports from the TEC for the Fall, Spring and Summer terms:

**New Brunswick**
*Faculty of Arts and Sciences:* Six reports per term, one for FAS as a whole, and one for each division of FAS; Humanities, Social Sciences, Life Sciences, Physical Sciences, and Mathematical Sciences. The reports summarize the results of Questions 9 and 10 on the student rating form for each division, for each department, and for each course level.

*Graduate School of Education:* Two reports per term. One summarizes Question 9 and 10 for each department in GSE, and for GSE overall. The other presents the dean with a list of instructors ranked by their scores on Questions 9 and Question 10.

*Cook College:* Reports similar to those for GSE are prepared at least once a year. On occasion, the Cook College dean's office asks for raw data, and prepares its own reports.

*Pharmacy:* Rankings of individual faculty, similar to one of the reports created for GSE, are sent to Pharmacy each term.

*School of Social Work:* Reports similar to those for GSE are prepared.

*CASE:* All courses using the new CASE rating form must be processed separately, using specialized software.

*Cooperative Extension:* All courses using the new Cooperative Extension rating form must be processed separately, using specialized software.

*Bloustein School of Policy and Planning:* The Dean has requested that all summary statistics sheets be sent not only to the chairs, but to the dean's office. We were also asked to provide all evaluation data for the past five years, since none of the department chairs had maintained their own files in that period.

*School of Communications, Information and Library Studies:* Dean Friedrich asked for a spreadsheet listing the Question 9 and Question 10 results for each faculty member evaluated.

**Newark**
*Rutgers Business School:* The Rutgers Business School requires the most comprehensive set of reports created by the TEC as a special order. Each result sheet for each faculty member in RBS receives special handling and processing. Separate reports are then created for the deans' office that give a comprehensive statistical overview of teaching in RBS. In addition, a special spreadsheet is created by the TEC, listing the mean scores for all 13 questions for each instructor in RBS. This spreadsheet is duplicated by RBS, and distributed to all students and faculty in RBS.

*FAS Newark:* The Dean has requested that all summary statistics sheets be sent not only to the chairs, but to the dean's office.

**Camden**
*School of Business:* Reports ranking each faculty member's scores on Question 9 and Question 10 are prepared for the dean. Faculty are ranked alphabetically and from highest to lowest score for each of these two questions.

*FAS Camden:* The Dean has requested that all summary statistics sheets be sent not only to the chairs, but to her office.

**Special Requests:** In response to the University Senate recommendations on “Best Practice on the Evaluation of Teaching.” (http://senate.rutgers.edu/050302se.html) We have begun to implement those portions of the recommendations. VP Forman has given the TEC a special allocation of funds for the purchase of a state of the art scanner.
This new 5000i Imaging System from NCS Pearson will:

- Improve the scanning rate currently at 6000 forms/hour to 9000 forms/hour
- Retain the marked answers in the same ASCII file format as currently provided
- Store images of both sides of the form
  - images of the answers marked for the rating questions on the front
  - student comments from the open-ended questions on the reverse side of the form

With these new functions we hope that we may now address some of the resolutions made by the University Senate in addressing the “Best Practices in the Assessment of Teaching:”

- Recommendation 3a states that “All written student comments should be available, at least in the supplement materials, to every level of reappointment, promotion and tenure process.”
- Recommendation 4 states that “Every department should securely keep on file all of the information contained on the completed student course evaluation forms for at least ten years, or since an individual faculty member’s last academic promotion, whichever is longer.”

Many departments have contacted the TEC for advice and assistance with these recommendations since the typical format of retaining these records is by filing the collections of original paper forms and for departments with large enrollments this quickly has become an issue of space and accessibility. With this new 5000i Imaging System, the TEC would be able to serve as the archive for these files for all departments in the University.

The University Senate also recommended in “Best Practices” number 6, that the TEC maintain a database of student instructional rating scores and summary sheets for each faculty member, to be proved to that individual faculty member, the department chair and the dean upon request. We would like to take the opportunity afforded us with the functions of the new scanner to redesign the Student Instructional Rating Survey processing structure to optimize the steps in the statistical processing to capture the image records, scanned data, statistical summaries and be able to deliver them electronically to the individual instructors and departments. This requires considerable reprogramming of the SIRS processing programs to incorporate the new function of scanned images of each sheet, and instructor NetID for return to instructors. A special request for support for a programmer is needed to be made at this time, since such expertise is not available within the TEC at this time.

We hope to begin with a pilot project this fall with the new scanner for the SIRS process which will enable us to retain not only the data from the marked responses, as we do now, but also images of the scanned sheets including the student comments.

We would like to create a new program so that as soon as the individual course packets of forms are scanned, we can email the individual instructors their files in the form of
  1) summary statistics page (which is what they get now in paper) and
  2) image files of the student comments.

We would post that collection on a protected site so that deans, chairs, department administrators, individual faculty would have access to their departmental collection of files as soon as their department was scanned and processed. This would significantly reduce the "turnaround time" for processing, printing and returning the packets to the departments for distribution to individual faculty.

Expenditures for the distribution and processing of the Student Instructional Ratings Forms

Expenditures for Student Instructional Rating Forms: For AY 2003-2004 we spent approximately $21,747 on SIRS forms. This includes a year’s supply of the standard SIRS forms, plus specialty forms for various departments and headers to be used next year.

Expenditures on materials: The materials expenses associated with the distribution and processing of the evaluation are considerable.

Copy machines:
- Maintenance: TS1,200  maintenance agreement on Canon copier
- Per copy charge: $0.10 color/$0.016 b/w
Copy paper: $969.00 per year

Envelopes for packets: $2,382 per year

Maintenance charge for
Opscan-10: $6,509. (The TEC has been paying for the scanner maintenance contract since AY 2001-2002.) Opscan 6: $900

Printer toner and maintenance: $702

Supplies: $450 (General purpose answer sheets, transparency film, markers, string, canned air, etc.)

Total wages of labor expenditures from 1 July 2003 to June 30, 2004: $67,668

Total Labor Costs for AY 2003-2004: $88,829

Breakdown of Labor Costs for SIRS:

William Warren: William Warren has become the mainstay of the processing of the student rating system. He earns $16 per hour, works approximately 30 hours per week, and effectively manages the student instructional ratings process. His earning for AY 2003-2004 are $22,848.

Cindy Mellios: Cindy works in the front office, has increased responsibilities as project manager, and support the evaluation process by working with the part time student workers, managing copying and ordering, and working directly on the distribution and processing of the student ratings forms themselves. Her current wage is $20.00 per hour, her wages for AY 2003-2004 are $28,022.

Therefore, the wages of William Warren, Cindy Mellios and Mary Jo Watts come to $50,870 for AY 2003-2004, this alone accounts for the more than $30,000 “one-time funding” that we have received for the last seven years.

Student wages of labor to support the evaluation for AY 2003-2004 totaled $21,132. We also spent $16,827 dollars on non-student, short-term, part-time labor to support the SIRS process. WE increased labor hours fro non-student part-time help to stabilize the labor force. Therefore, the total labor costs for the distribution and processing for the SIRS system was $88,829.

Additional related costs: Because of the increased use of the online Student rating data, we spent extra effort and dollars this year ensuring that data was on the SIRS.rutgers.edu site. We also invested time and effort into the development of a new database search function. The later is currently only available on an internal TEC site.

Mary Jo Watts: Mary Jo Watts, a Ph.D. candidate in Comparative Literature, has assisted in the design, updating and maintenance of Student Instructional Ratings Survey website, http://sirs.rutgers.edu. Her earnings for AY 2003-2004 are $21,727.

Melissa Malana: our former administrative assistant who was uniquely qualified as a skilled programmer spent about 25% of her time working on this project. She made great progress and created the current version of the database search tool on the internal TEC site. We are experimenting with the tool this year. Although this tools is very useful internally, but we have learned with Melissa’s efforts, that it will not function on the SIRS.rutgers.edu site. Given that we are getting a new scanner and will need to redesign formats and programming for this new machine, we intend to redesign the SIRS processing programs so that a query-able database is created for the SIRS.rutgers.edu site.

II. Programs implemented for the first time this year:
II. A. Web development, templates and focus groups: At the request of VP Kavanagh, Professor Gigliotti attended a meeting with VP McKay and Executive Director Kim Manning-Lewis to discuss ways to facilitate the use of University-wide protocols for web page design. The TEC organized focus groups for academic users and administrative users, and found strong support for a templated approach to web development in the short term, and for a Content Management System operated by RUCS in the long term. Joe Delaney and Mary Jo Watts of the TEC conducted considerable research on best practice in other Universities, and found some useful models for templates and more advanced structures. These new approaches will be offered to the faculty and staff in AY 2004-2005.

II.B. Web tools, wiki’s and blogs: The TEC introduced the faculty to a number of new, easy to use, web based instructional tools. Wiki’s allow multiple users to work on an online text document simultaneously. Joe Delaney offered both workshop and individual support to interest faculty, and Professor Larry Scanlon of English used the wiki effectively in Fall 2004. Joe also made a presentation on Wiki’s and Blog’s to the RITE conference in May, 2004.

II. C. Person Response System: year long discussion: Though hand-held personal response keypads have been used in instruction in New Brunswick for the past few years, AY 2003-2004 marked a wide expansion of their use and an increase in faculty interest in further use of these tools. The keypads allow students to respond to questions asked by the instructor very efficiently. Data from the responses is immediately processed and analyzed, and presented to the class. Paperless quizzes are easily administered and graded immediately.

In response to this intense faculty interest, the TEC organized a presentation to the faculty by Professor Bill Sofer, an expert user of one of the two personal response systems available on campus, on Friday, November 14, 2003. Professor Sofer’s presentation increased faculty interest even more, and a second presentation was organized for May 5, 2004. At this second presentation, faculty members who had used both available personal response systems discussed their experiences with interested faculty and graduate students. Vendors for both systems also attended to answer questions about the technical properties of their systems and software. There was a lively discussion among the faculty about the kinds of instructional tools they would like to see available on campus, and where they would like these tools to be located. THE TEC will install additional response systems this summer, to be available for classes in Fall 2004.

III. Major Accomplishments

III.A. Further Implementation of the “Best Practices in the Assessment of Teaching”

Over the past two years, we have observed that there has been a large increase in usage of the Student Ratings data that is available online at http://sirs.rutgers.edu. As we have observed in the past, usage soars during registration periods. We are very pleased that students, faculty and staff have taken advantage of the accessibility of the data made possible by the University Senate resolution of March 23, 2001.

We have also made considerable progress in support of the “Best Practices in the Evaluation of Teaching” resolution of May 2002. Thanks to VP Forman, we have been able to purchase a new high speed imaging scanner that will allow us to scan and store not only the data from the ratings forms, but also the comments. This will eventually allow departments to dispense with the storage of the actual paper forms, which was mandated by the resolution. Also, EVP Furmanski has asked the deans in New Brunswick to implement the Best Practice resolution. Subsequent to his request, we have been contacted by the colleges and schools in New Brunswick, asking for TEC assistance in developing teaching portfolios and peer review systems.

The TEC has also been improving our management of the SIRS data and of our processing system, as suggest in the Best Practice resolution. Our former Administrative Assistant, Melissa Malana, created a new search program for the TEC’s internal website storing all student ratings data. This system
allows department heads and administrators quick access to the ratings for any instructor on campus. We will make this search tool available more widely over the next year.

Usage Rates for http://sirs.rutgers.edu:

http://www.rci.rutgers.edu/stats/web/sirs.rutgers.edu/
III. B. Faculty Use of PRS

As mentioned above, faculty interest in personal response systems for teaching grew considerably this year. Our presentation on May 5, 2004, was very productive, in that members of the faculty who had never used such a system for teaching, were able to see just how they work and talk directly with expert faculty users of this technology. From that workshop, the TEC was able to determine where to install new PRS systems to facilitate and improve instruction and learning. Most particularly, Professor John Krenos of Chemistry who has used the PRS for years, and his colleague, Professor Robert Boikess, will coordinate the use of PRS teaching methods in introductory Chemistry classes, both on the Douglass/Cook campus and on the Busch Campus, once we have installed a PRS system in Arc 103. Other interested faculty include members of the Psychology department, who have lately been active in using a variety of new teaching technologies, and members of the Economics department.

The TEC is very pleased that so many faculty are taking to this new teaching tool. It is inexpensive to install and operate. According to the reports of Professor Sofer (Genetics), Professor Krenos (Chemistry), Professor Shapiro (Physics) and Suzanne Brahmia, Associate Director of MSLC, these tools improve attendance, student interest and student participation in the large lecture courses significantly. This is an important goal, and the TEC will do all it can to make these tools available to all interest faculty users.

III. C. Coordination of Support for Web Development

The TEC was very glad to participate in a new effort to improve technical and administrative support for the development, use and maintenance of web sites in the University. This is a complex issue, involving staff and faculty across the campus. Our focus group participants re-enforced that web pages are the primary method of information transfer now used in the University for academic and non-academic purposes. It is critical to communications within and without the University, that web sites be up-to-date, easy to use, and well supported. There are considerable challenges in meeting this goal. First, some standardization of ‘look and feel’ of University web sites is necessary. University Relations has already established some standards which are very helpful. Secondly, an efficient method of developing and using sites within that standard is required. Our focus groups made this very clear; we did considerable research on templates, and will introduce new templates during AY 2004-2005, and work closely with RUCS and University Relations to make them available and useful to users in the University. Third, it is very clear that the long run solution for web page development and support is a Content Management System that will make web page design and updating virtually effortless. This will require considerable technological investment. Leadership for this development will be in the hands of RUCS and VP McKay. In the meantime, the TEC will work closely with RUCS to assist the staff and faculty in the use of templates and web tools now available. Finally, our focus groups were helpful in determining the considerable changes occurring in the labor force at the University, and the need to provide training to facilitate a sensible restructuring of that labor force over time so that it can effectively use modern communication and data storage systems.

III. D. Strategic Plan Instructional Technology Support

The TEC presented a proposal to EVP Furmanski on March 31, 2004, for the restructuring of the Enhanced Classroom Support office, to improve technological support for teaching. The drafting of this proposal was significant, since it laid out clearly the size of the commitment the University must make to adequately provide teaching tools and support for them over the coming years. Since that time, considerable effort has been made by the TEC and RUCS to coordinate activities for the coming year, to better serve the University community. In particular, we will work together to provide better support for instructors in the classrooms, in using online tools such as WebCt, and in the development and design of website for teaching. We will also participate in the strategic planning by RUCS for the future development of online and computer based teaching tools, and in the design and development of teaching spaces in the University, from traditional classrooms to wireless teaching spaces to networked teaching facilities.

IV. Goals for the Coming Academic Year:
IV.A. Further Implementation of “Best Practices of the Evaluation of Teaching”

The TEC will continue to implement the recommendations of the University Senate. As mentioned above, thanks to VP Forman, we will shortly receive a new image scanner that will allow us to complete redesign the data structure of the Student Ratings System. In particular, we will create a new data base so that users of the SIRS website will be able to find information on particular instructors with ease. In addition, we will have the capability of scanning the comments from the forms, making storage of the forms unnecessary.

Our plan is to pilot the use of the new scanner, using some selected departments in Fall 2004. By Spring 2005 we will then expand its use across the University. We are very grateful to have the opportunity to do this.

IV. B. Faculty Review of Deans

The university senate has proposed a new methodology for the faculty review of deans. Dr. Devanas will continue to offer her considerable expertise for colleges and schools conducting a decanal review. In particular, a University wide body will direct these decanal reviews. We are very pleased that Dr. Devanas widely viewed as a valuable asset in this process and will continue to serve the University as an advisor to the reviews.

IV. C. Instructional Technology and Enhanced Classroom Support

At the time this document is being written, the University has recommended that the student fee for instructional computing should be increased by $25 per term. It is our hope that the Board of Governors will agree to this increase, and that the TEC office of Enhanced Classroom Support will receive some needed funds from that increase to improve the quantity and quality of equipment and support for the enhanced classrooms. The TEC has been working closely with VP McKay and Chuck Hedrick, Chief Technical Officer of RUCS to establish a stable cooperative and effective instructional support structure. The need is great. Instructors can no longer function effectively without considerable technological support in the classroom, throughout the University network, on University web environment, and within the classrooms themselves. It is our duty to ensure that the faculty can use the tools they need to be excellent instructors, and that students have the tools available to make them effective learners.

IV. D Staff training and consulting

The demand for staff training and consulting has surged again this past year, and we are confident it will continue to do so. The nexus of necessity between staff, faculty and students, is the University network and web based tools using it. All parts of the University community must be able to function well ‘on the net’ for the University to reap the benefits of efficient administration, effective teaching, ‘state of the art’ academic research and improvements in learning by students. Besides our collaboration with RUCS on instructional support, we will also work closely with RUCS, University Relations and Human Resources to model improved business practices and provide strong support for staff and administrators.