End-of-Year ETF Report
Fiscal Year 2010-11
College of Textiles

1. Categorized ETF Expenditure Summary

A) Personnel

1. **$79,451 -** Total spent for professional support staff (salary + benefits) - Staff support provides critically needed support for specialized textile software applications and software packaging for the students and ETF computers.
2. **$77,207 -** Total spent for student-worker staff - Student workers provide help with installing computer labs as well as support for a walk-up help desk in the TCO office. Graduate student assistantships were funded in addition to the help desk roles. (see 2A.3).

B) IT Infrastructure: Equipment and Services (computing labs, networking, etc.)

$71,044	**Computer Hardware/Equipment**
$70,589	Replacement computers for student labs
$455	Hardware and cables for computer installations
$2626	**Software**
$1044	MS Windows Agreement (estimated amount)
$1044	MS Office Agreement (estimated amount)
$538	Articulate software for TMS 211 Online
$9,908	**Network Communication Charges for ETF computing**
$9,470	Monthly network charges
$400	One-time connection charges
$38	Phone charges

C) Non-IT Infrastructure

$49,023	**Microscopes for Fiber Science Laboratory**
$39,555	**110 Classroom Upgrades**
$34,916	**Teaching Lab Machines and Supplies**
$10,000	**Knitting Machine**
$20,487	**Supplies for teaching labs (chemicals, sensors, fibers, yarns and fabrics, etc.)**

D) Discipline/Instructional: Field trips, professional development/experiences, travel, conferences, services, etc.

$1,230	**Training for specialty software**

$3,900 Training for faculty

2. Justification/Purpose of Expenditures– Strategic Overview

A) New and/or Transformative Initiatives Undertaken with ETF

1. The majority of ETF funding is used for supplies for various laboratories, replacement computers and software, as well as technical support staff.
2. As indicated in previous reports, the software used by students in different majors is becoming more specialized. This not only impacts selection of appropriate hardware, but additionally requires considerable input from support staff. It has been found necessary to dedicate an IT specialist to be responsible for configuring machines to enable the use of recently acquired software and routine maintenance and set-up for laboratory/studio classes.
3. As with previous years ETF support was used to fund several graduate TA's. The funding used for student-workers was exceptionally high because of a special dispensation by Graduate school, which permitted the use of GSSP funding to support students appointed as TA's through ETF funds. The COT ETF committee agreed to allocate $40k to each department ($80k) to support TA's. This was offset by an allocation of $40k to each department ($80k total) from "Naming Opportunities Funds" thus rendering neutral the funds available to purchase teaching equipment and supplies etc. An additional effect of this decision was that health insurance was charged against this account but this was reimbursed by the University (to a ledger-2 state appropriated account)).
4. The use of additional one off ETF support combined with funds from other sources has enabled us to update our five main 110 classrooms (2207, 2208, 2209, 2210, 2211) to incorporate "classroom capture" capabilities. The use of these resources was piloted in classes during the spring semester.
5. A late request for ETF one off support enabled the purchase of a replacement knitting machine, which will be used by many students.

B) Actions taken to improve efficiency/return on ETF investments

1. The College has excellent relationships with the industry and negotiates significant discounts on most purchases. Additionally, the ETF funding is often matched, or supplemented, by financial support from other sources. The College ETF Committee critically reviews proposed expenditures and primarily supports purchases which will benefit the maximum number of students.
2. As indicated above the college has access to some alternative, but limited funding and this was critical in 2A.3, since this enabled us to appoint more students by utilizing matching funds to support labs and teaching.
3. Network file space was purchased from the Office of Information Technology instead of purchasing a server for the first time this year. This will represent a significant cost savings each year from not having to purchase a primary, backup and disaster recovery server.

C) Unmet ETF- eligible needs

As indicated in previous years, the changing enrollment pattern of students entering the College, particularly in their choice of major, requires more specialized computing resources and other equipment. The specific unmet needs of the Departments are:

1. TATM Department

a. Materials for the Textile Management Science Laboratory: this is a newly established laboratory which will be potentially used by the majority of students in COT. Financial shortfalls during the reporting period precluded to the purchase of materials for this laboratory for student use. If monies existed, we would have purchased:

i. Data sources - print materials and data bases/sources that are used by students in the classes and which are not available via the library or online.

ii. Presentation materials/props/mannequins/display fabrics and backgrounds - for use in display of materials and products, several brand marketing classes, and in fashion classes.

iii. Technology for use in analysis and presentation of FTM classroom projects.

iv. Miscellaneous supplies for student usage.

b. Lab supplies to be used by the large number of students in the labs to complete classroom assignments in the Digital Design Center; Fashion Studios; Textile Design Studios; and other Departmental laboratories. These unmet needs range from class supplies such as fabric, paper, dyes for printing etc. through to replacement electrical components to facilitate repair to necessary machines.

c. Resources to enable students to have greater exposure to global competitions. These include brand marketing, fashion, design, and new product development competitions, which not only form a key part of a student's career development but also raise the profile and increase the prestige of our programs (and students).

d. An additional issue is the introduction of a new program (Fashion and Textile Design – FTD) which will make greater use of the studio experience that will require a greater number of smaller classes coupled with greater demands on our various laboratories. Specific unmet needs for the FTD program include:

i. Flat screen monitor (52 inch) with stand for use in First Year Studio (portable; to allow usage in studio and classroom; instructional purposes

ii. Display board, Velcro based textile covering/skin (or foam board) for critique area in First Year Studio (large wall space in studio)

iii. Easels (n = 10) for student display area

iv. Projector for #4411 (specialty computer laboratory) for instructional usage with 30 student computer laboratory

v. Card key access for #4411 (to allow students entry to specialty computer lab -- lab open during library areas)

vi. Software licenses to accommodate additional computers in #4411 (currently have 18 licenses, need additional 14 licenses for additional computers in specialty computer lab ; E.A.T., Lectra)

vii. Flat screen monitors (2) for back of #4411 – with large, narrow laboratory, important for students at back of laboratory to have view of material illustrated on front screen)

e. Laser cutter for use with design and development activities in the TATM and TECS Departments. This cutter will be used with a variety of textile materials – for a variety of textile end uses (home, apparel, medical, nonwovens, industrial/technical, transportation).

f. Replacement of industrial machines (fashion studio). With heavy usage (~ 250 undergraduates in the Fashion Development concentration), it is necessary to replace machines (and upgrade) on average of five (5) machines per year.

2. TECS Department
   a. For all TECS programs, we have an immediate need for a medical textiles laboratory for undergraduate and graduate instruction. This has been an unmet need for several years, but the recent increase in student numbers in the medical textiles concentrations (which is likely to continue to grow) has raised the significance of this need.
      Approximate cost $80,000.
   b. For Textile Engineering, the digital and analog electronics laboratory has aged considerably, and we have an immediate need for oscilloscopes and circuits laboratory kits.
      Approximate cost $10,000.
   c. For PCC, we have an immediate need for properly calibrated light boxes. We also need a new high quality ink-jet printer for PCC.
      Approximate cost $15,000.

3. College Laboratories
   a. The college has several processing laboratories which house industrial scale machinery for the manufacture of various textile products. These laboratories are used in undergraduate and graduate classes and also find extensive use by students working on special projects or in capstone classes. The machinery in these laboratories is ageing and requires updating or replacing. As indicated in an earlier review (June, 08) it is estimated that this would require an additional $2 million.

4. IT Infrastructure
   a. As in earlier years, the need for SPA full-time labor to maintain and support ETF computer labs in the College continued to increase this fiscal year. The College has appointed a Tier 2 support person for software training and installation. The need still exists for a .50 FTE Tier 1 support person to address the needs of the students and instructors inside and outside of the classroom.

3. Assessment of impact of ETF investments on student learning

Our major use of ETF funds is to support all of the hands-on activities in our laboratories. It is essential that these facilities should be up to date and at least representative of those found in industry/research labs. The ETF monies also provide the students with a general purpose computing labs and specialty labs, which closely relate to the student's major. The specialty labs supported by the ETF monies provide the students with the software and applications that they will utilize in future careers. This ensures that our students are very marketable in the workplace. The above discussed labs could not exist without the ongoing support of ETF monies.

We intend to utilize surveys we have developed to get feedback from students and alumni regarding their experience with technology. These surveys, together with data obtained from University student surveys, allow us to continue to assess the impact of the technology on their learning outcome.

4. Planning and review process

The College has an ETF committee that oversees the ETF expenditures. The committee consists of the 2 Department Heads, the Associate Dean of Academics, the Assistant Deans of Information Technology and Finance & Administration, the Director of Textiles Online Programs, a graduate student representative and an undergraduate representative. Input on needs is solicited from students, staff and faculty in the college and requests for funding are reviewed by the committee. The College operates under a four year plan for ETF expenditures for IT related systems.

We monitor the use of ETF funded computer labs and this is influential in deciding the number and location of computers throughout the college. We are also aware that very few of our freshman class do not possess a personal computer and his has also influenced our investment decisions. The broad spectrum of majors within the college and the fact that they require quite different specialist software, has guided our decision away from one large computing facility to several smaller laboratories. However these labs require greater support and unfortunately the use of proprietary specialist software means that groups of computers are essentially dedicated for students in certain majors.