Collaborating for Excellence!

Submission to Academic Planning on behalf of the Administrative and Technical Staff

May 28, 2010
This report is based on thoughtful input from a group of administrative and technical staff too numerous to mention. Their collective participation in the advance planning event on February 9, 2010 and in Faculty Day on February 16, 2010 resulted in a wealth of ‘raw material’. A smaller group of staff representatives met on April 23, 2010 to refine the material into the following plan.

My thanks to all contributors, and especially:

- Manfred Aulich, Undergraduate Laboratory Manager, Department of Electrical and Computer Engineering
- Shilpa Gantotti, Manager of Marketing and Communications
- Karen Lewis, Director Human Resources
- Phil Poulos, Director Engineering Computing Facility
- Arlene Smith, Business Officer, Department of Chemical Engineering

I am also grateful to Scott Ferguson of Progress Consulting, who provided invaluable assistance in mining the ideas and formulating this plan.

Catherine Gagne
Chief Administrative Officer
Collaborating for Excellence!

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EXECUTIVE SUMMARY

Administrative and technical staff conducted a three-step process, highlighted by an all-day planning session on Faculty Day that involved approximately 140 people, to develop a strategic plan for administrative and technical functions and to prepare our submission to the academic planning process.

The planning activities were designed within the context of the Academic Planning Framework. We have reconciled our key findings to the pertinent sections of the Academic Planning Framework and have responded to the Framework’s focus questions.

Our planning activities included “collaboration” among our topics. However, and more importantly, our discussions revealed that collaboration represents more than “a topic” and, in fact, is the key driver for us to optimizing service excellence. Accordingly, we have titled this submission, Collaborating for Excellence!

Our discussion addressed the importance of collaboration at three levels:

• with one another, especially interdepartmentally,
• with students, and
• in partnership with members of faculty.

Indeed, a recurring theme throughout all of our planning discussions is our desire to carry out our roles along-side members of faculty in the spirit and practice of partnership as we collaborate in our joint pursuit of our academic mission and world-class excellence.

We believe that such partnership:

• is a very practical and necessary contributing factor to our Faculty’s:
  o creation of leading research
  o educating future engineers, and
  o maintaining and advancing our standing among the world’s leading schools of engineering, and
• is central to creating a culture of excellence, such as our Academic Planning Framework calls us to achieve.

During this process, some technical staff, especially those who are directly involved in students’ learning process, expressed the view that their issues and concerns link more closely with those of faculty than with those of administrative staff. This insight should influence how our Faculty organizes future planning activities and conducts collaborative decision-making.
The following are the key specific outputs of our planning process:

### Concepts of Administrative and Technical Mission/Purpose

This process did not lead to a Mission Statement for administrative and technical staff per se. That will be a future step. However, we agreed upon several concepts that describe our role or mission or purpose.

Administrative and technical staff view their role as:

- Being essential
- Innovative professionals
- Who act as agents of change
- And collaborate with and support students, faculty, alumni and industry to implement our Academic Mission
- Provide a stable, reliable, safe and efficient environment for academics, administrators and students to achieve their goals
- Contribute to and implement Faculty guidelines and policies
- Provide the necessary technology, records, advice, integration, service and support for research and learning, and
- Play a vital role in fostering and enhancing the Faculty’s financial health.

### Our Vision of Excellence

*Creating a positive work environment*

*Demonstrating high values*

*Providing quality service*

*Going above and beyond*

### Benefits of Excellence

We believe that pursuing and realizing this Vision will be very beneficial to:

- Academic staff
- students
- the engineering Faculty as a whole
- the industry and community, and
- us, the administrative and technical staff.
Initial Gap Analysis

During Faculty Day, we conducted an initial gap analysis to describe the difference between Our Vision of Excellence and our perception of the situation today. We believe that the work of administrative and technical staff reflects our Vision "most of the time" or at least "more often than not". The remainder of our planning focused on how to raise our standard of excellence to reflect our Vision more closely and consistently.

Key Metrics

As we fulfill our concepts of our mission and pursue our Vision of Excellence, the following are key metrics we will develop and apply to measure our performance:

- Quick response
- Satisfied clients
- Enhanced accessibility of information
- Ease of use and corresponding time savings
- Fewer misunderstandings
- Fewer errors and fewer opportunities to make errors
- Consolidation and reduced duplication
- Improved communication
- Reduced down time
- Reduced costs
- Proactive responses, and
- Stakeholders’ confidence in our service.

Roadblocks

A strategic plan that does not identify, face up to and address roadblocks, being potential obstacles to our success, will not likely succeed. Our planning process encouraged candour to enable us to identify and discuss roadblocks and design strategies that deal with significant roadblocks that we face.

Prioritization

Throughout the planning process, we applied the Pareto Principle to continuously focus on the most significant opportunities and roadblocks we face and then develop the fewest strategies to address them.
Our Seven Strategies

Our seven strategies to realize Our Vision of Excellence are:

1. Strengthen collaborative decision-making
2. Hold events to bring staff together
3. Use technology to share information
4. Create documents and statements to strengthen corporate memory and facilitate appropriate standardization
5. Allocate resources to provide tools and equipment to facilitate service excellence
6. Enhance orientation and training
7. Quantify and apply performance metrics.

Process for Implementation

The process to transform these seven Strategies into reality, and to narrow the gap between our Vision and our situation, comprises two major steps for each of the seven Strategies:

- Identify aspects that are Faculty-wide in scope and assign accountability and responsibility for implementation, and
- Provide information and support such that the remaining aspects can be readily implemented as appropriate in local units across the Faculty.

To get implementation underway, we have developed high level action plans for those Strategies and aspects of Strategies that suit and require Faculty-wide implementation.

Process for Keeping Our Plan Current

We conducted our planning within the context of a 5 year time frame. However, in times of rapid change, we believe that it is increasingly important that multi-year plans such as this be reviewed and updated annually to seize new opportunities and address evolving changes in circumstances.
Collaborating for Excellence!

APPLICATION OF THE ACADEMIC PLANNING FRAMEWORK

This is the submission of the non-academic staff from across the Faculty of Applied Science and Engineering to the Faculty’s academic planning process. It is based on the Faculty’s Academic Planning Framework.

Not all aspects of academic planning are relevant to administrative and technical roles.

The following aspects are particularly pertinent:

- Positioning – Defining our “Excellence”
- Culture of Excellence – Creating a Culture that supports our aspirations of Excellence
- Student Experience – Contributing to the successful development of future, global engineers
- Collaboration – Achieving excellence through collaboration
- Resource Allocation – Making optimal use of available resources for maximum impact
- Priorities – Doing what matters most.

The nature of administrative and technical work suits the use of a strategic planning model, rather than a process of addressing each of these six Framework questions separately. Accordingly, the body of this document reflects the results of strategic planning that takes the topics into account.

Appendix “A” reconciles the content of this report to these six topics from the Framework. Appendix “B” answers all of the Framework’s focus questions.
A Three-Phase Process

This plan was developed through a three-phase process:

1. A half day workshop where approximately 25 administrative and technical representatives developed key strategic concepts to consider
2. Faculty Day where approximately 140 administrative and technical staff met to consider those strategic concepts and develop the bulk of this report, and
3. A follow-up workshop in which six representatives analyzed the results of Faculty Day and developed high level action plans for implementation.

Topics

The topics addressed by this process, and the format of this report, are:

1. Participants' perspective on the importance of academic planning
2. Outline of concepts of our administrative and technical mission/purpose
3. A newly defined vision of administrative and technical excellence
4. Metrics of excellence
5. Benefits of excellence – to us and to our stakeholders
6. Examples of administrative and technical “best practices”
7. Results of a gap analysis: “What is” vs. “What should be”
8. Recommendations to close the gaps
9. Proposed high level plans for implementation
10. Reflections and articulating next steps

The result of this process is this plan that forms a submission to the academic planning process for:

• feedback
• ultimate approval by the Dean
• endorsement by Chairs and Directors
• support within each of the departments and units, and
• subsequent implementation

The Chief Administrative Officer has overall responsibility for overseeing our:

• successful implementation of the plans, and
• continuous improvement toward the realization of our Vision as indicated by our success against our metrics.

The Emerging Theme

The primary theme that emerged from these three planning events was the vital role that collaborating plays in the pursuit of administrative and technical excellence – reflected in the title of this report.
SIGNIFICANCE OF ACADEMIC PLANNING – OUR PERSPECTIVE

Participants’ Perspectives

Participants were asked their views on the Faculty’s 2010 academic planning process.

Key Themes

From the perspective of administrative and technical staff, academic planning is very important, both:

1. Periodically, such as a formal revisiting of academic strategy and priorities every 5 years, and
2. On an ongoing basis, through continuous refinement in response to rapid change.

First and foremost, academic planning should build on our momentum and protect and further advance our high standards and academic success.

Our present academic planning should not merely replace Stepping Up!, but also build upon it where appropriate.

The process is an important opportunity to integrate our own wisdom accumulated over the years with the best thinking and input of recent newcomers (faculty and staff) and our external stakeholder community, including alumni and industry. The process also has a galvanizing potential, to bring us closer together as colleagues both within departments and across the Faculty.

Our Faculty faces many changes – demographic, economic, technological, to name a few – and we need effective Faculty-wide planning to help us agree on how we’ll navigate such changes.

The academic plan should be a valuable and flexible framework to guide decision-making and resource allocation. It cannot be static.

It should:

• Help us to attract the best possible students, faculty and staff
• Provide important context for individuals and groups to understand their role and how best to contribute to the fulfillment of our academic mission
• Provide strategic guidance to be proactive in evaluating and seizing appropriate opportunities as they arise
• Guide our efforts to make the best use of resources
• Contribute to our efforts to keep the Faculty financially sound and strong, and
• Provide a basis for monitoring our quality and progress in achieving our academic mission.
MISSION

Mission

This section answers the questions, “Who are we? Why are we here? Thus, what is our Purpose?”. While this process did not include the drafting of a formal mission statement per se, participants discussed and agreed upon the following important themes.

Concepts of Administrative and Technical Mission/Purpose

Administrative and technical staff view their role as:

- Being essential
- Innovative professionals
- Who act as agents of change
- And collaborate with and support students, faculty, alumni and industry to implement our Academic Mission
- Provide a stable, reliable, safe and efficient environment for academics, administrators and students to achieve their goals
- Contribute to and implement Faculty guidelines and policies
- Provide the necessary technology, records, advice, integration, service and support for research and learning, and
- Play a vital role in fostering and enhancing the Faculty’s financial health.

One of our tasks in implementation will be to formalize these concepts into a shared Mission Statement. See Strategy 4.

VISION OF EXCELLENCE

Four Key Aspects

Participants developed a shared vision of administrative and technical excellence.

Our Vision of Excellence

Creating a positive work environment

Demonstrating high values

Providing quality service

Going above and beyond

Details appear in Appendix C.
METRICS OF EXCELLENCE

Twelve Key Metrics

Participants identified twelve important metrics for measuring and recognizing excellence, and indicated the applicability of each across the four themes of their shared vision, as follows:

<table>
<thead>
<tr>
<th>Positive Work Environment</th>
<th>Demonstrating High Values</th>
<th>Quality Customer Services</th>
<th>Going Above and Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theme “A”</td>
<td>Theme “B”</td>
<td>Theme “C”</td>
</tr>
<tr>
<td>a) Quick response</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>b) Satisfied Client</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>c) Enhanced accessibility (eg: of information)</td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>d) Ease of use (time savings)</td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>e) Fewer misunderstandings</td>
<td>√</td>
<td>√ (Transparency)</td>
<td>√</td>
</tr>
<tr>
<td>f) Fewer errors – fewer opportunities to make errors</td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>g) Consolidation: reduced duplication</td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>h) Improved communication (eg: through promotion)</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>i) Reduced downtime</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>j) Reduced costs</td>
<td>√</td>
<td></td>
<td>√ (others’ downtime)</td>
</tr>
<tr>
<td>k) Proactive response</td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>l) Stakeholders’ confidence in our Service</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

Strategy 7 quantifies and operationalizes these metrics.
BENEFITS OF EXCELLENCE

Overview of Process

Participants identified the following benefits of administrative and technical excellence.

To Academic Staff

a. Smooth co-operation between faculty and administrative staff; enhanced relationships
b. Enhanced productivity and achievements of faculty
c. Improved communication

to Students

d. Generally, if the goals and needs of academic staff are satisfied, there are fewer problems for students
e. Enhanced student experience
f. Enhanced pride in the Faculty of Applied Science and Engineering

to the Engineering school as a whole

g. Reputation – raised profile for recruiting academic staff
h. Reputation – raised profile for recruiting excellent students
i. Reputation – raised profile for recruiting excellent administrative and technical staff

To Administrative and Technical Staff

j. Positive work environment
k. Rewarding careers
l. Pride
m. Career advancement

To Others

n. Civic pride (community's pride in U of T Faculty of Applied Science and Engineering)
o. Society: Contributing knowledge to society
p. Other Faculties: demonstrating high standards.
GAP ANALYSIS

“What is” vs. “What should be”

Overview of Process

Participants identified the gap between “what is” (today’s situation) and “what should be” (their shared vision), the gap to be closed through the design and implementation of Strategies and action plans.

The following table tallies the reports of eighteen discussion groups, each with approximately 8 participants, shown as a percentage of the total number of groups.

<table>
<thead>
<tr>
<th>VISION OF ADMINISTRATIVE AND TECHNICAL EXCELLENCE</th>
<th>TODAY’S SITUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Always/Virtually Always</td>
</tr>
<tr>
<td>A) Positive Work Environment</td>
<td>5%</td>
</tr>
<tr>
<td>B) Demonstrating High Values</td>
<td>5%</td>
</tr>
<tr>
<td>C) Quality Customer Service</td>
<td>5%</td>
</tr>
<tr>
<td>D) Going Above and Beyond</td>
<td>10%</td>
</tr>
</tbody>
</table>

Expanding Our Perspective

Administrative and technical units will expand our perspective on this gap analysis by using the detailed version of the shared Vision (Appendix C) to survey our client groups on a periodic basis. This will be one of several ways that we will obtain input to guide continuous improvement in our pursuit of excellence.
PROCESS OF STRATEGY DEVELOPMENT

Overview of Process

Discussion groups were assigned pertinent themes from the Academic Planning Framework, being,

A. Positioning – Defining our “Excellence”
B. Culture of Excellence – Creating a Culture that supports our aspirations of Excellence
C. Student Experience – Contributing to the successful development of future, global engineers
D. Collaboration – Achieving excellence through collaboration
E. Resource Allocation – Making optimal use of available resources for maximum impact.

They added two topics to this list:

F. Training
G. Outreach (to alumni, industry).

For the topic assigned to them, they were asked to respond to the Gap Analysis in the previous section, and on their reflection on “best practices” (see Appendix "D"), in three ways:

• Reasons to celebrate
• Explain what causes the gap
• Propose Strategies to close the gap.

This logic path can be drawn as follows:
SEVEN KEY STRATEGIES TO ACHIEVE EXCELLENCE

1. Strengthen collaborative decision making

In meeting needs of students, and conducting world-class research, the work among faculty, students, technical staff and administrative staff is inherently inter-dependent. As a Faculty, we have an opportunity to manage these interdependencies more effectively and efficiently.

Decisions are often made from an academic perspective, to be implemented in whole or in part by their administrative and technical colleagues. Many of these decisions do not fully take into account significant technical or administrative considerations, and thus, are suboptimal. This is perceived to undermine effectiveness and efficiency, and is a major source of frustration among technical and administrative staff.

As a Faculty, we have the opportunity to be more effective and efficient through a continuous collaboration, indeed a spirit and practice of partnership, among faculty, technical and administrative staff, that reflects the inherent interdependencies of our roles and our work.

One potentially significant contributor to operational effectiveness, efficiency and economy is the inclusion of administrative and technical staff in the regular meetings of academic administration, beyond the current level of membership.

2. Hold events to bring staff together

This includes continuing the Faculty Day annual event along with starting new events such as Departmental open houses to learn about each other, Charity team building events, networking opportunities, and Town Halls on varying themes combining academics, students and admin. The inclusion of admin awards at the Celebrate Success awards event is a most welcome approach.

3. Use technology to share information

This includes information about the staff and their jobs, allows for the creation of special communities of staff, provides a forum for sharing best practices, and gives them voice to express constructive criticism and offer suggestions.

4. Create documents and statements to strengthen corporate memory and facilitate appropriate standardization

This strategy aims to create a culture that values, documents and protects information that is essential to effectiveness, efficiency, economy and appropriate continuity, including the continuity of essential operations, such as in the case of an extraordinary “business interruption”. We need to develop and protect corporate memory to appropriately leverage current knowledge and past experience. We will formalize our concepts of mission and purpose into a shared Mission Statement. As well, we will develop standards and a common approach for the appropriate standardization of processes in the interests of student satisfaction, meeting other client group expectations, and in general demonstrating “best practices”.
5. Allocate resources to provide tools and equipment to facilitate service excellence

As we discussed the gap between our Vision of Excellence and today’s situation, a cause of the gap that surfaced frequently was the need for a more coherent process for acquiring, upgrading and replacing the computing tools (software, hardware and other equipment) that we use to perform our services to ensure that the process is always responsive to the most important needs. Accordingly, one of our seven essential Strategies is to improve that process.

6. Enhance orientation and training

A recurring theme in our discussions was the variability of skills across similar positions. We will identify and provide training in response to the competencies required to fulfill our Vision of Excellence. As well, we will provide appropriate orientation and reorientation, from both a Faculty-wide and job-specific perspective.

7. Quantify and apply performance metrics

In consultation with our many client groups, we will quantify, apply, monitor and guide continuous improvement through the twelve metrics identified in this document.
The result of this process is this plan that forms a submission to the academic planning process for:

- feedback
- endorsement by Chairs and Directors
- support within each of the departments and units, and
- subsequent implementation

The process to transform these seven Strategies into reality, and to narrow the gap between our Vision and our situation, comprises two major steps for each of the seven Strategies:

- Identify aspects that are Faculty-wide in scope and assign accountability and responsibility for implementation, and
- Provide information and support such that the remaining aspects can be readily implemented as appropriate in local units across the Faculty.

The assignment of roles will be applied using the RACI model:

- a flexible model for project management that is common in IT applications,
- that features helpful definitions of Responsibility, Accountability, Consulting and Informing,
- assigns roles to projects in a way that is very fluid and suits the peculiarities of each project, and
- particularly suits Faculty-wide technical and administrative strategies that necessarily involve people from various units across the Faculty.

As part of further action planning and implementation, we will encourage, both within each unit and at a Faculty-wide level, those activities that should be de-emphasized, reduced or discontinued.

To get implementation underway, high level action plans for Faculty-wide implementation have been developed, and appear in the next section of this report.

The Chief Administrative Officer has overall responsibility for overseeing our:

- successful implementation of the Strategies and related action plans, and
- continuous improvement toward the realization of our Vision as indicated by our success against our metrics.
HIGH LEVEL ACTION PLANS

The following are high level action plans for each of the seven Strategies that:

- are intended for a 12 to 18 month time horizon, and
- will be fine-tuned by those involved in implementation once the Accountability and Responsibilities for each of the Strategies have been assigned

<table>
<thead>
<tr>
<th>Strategy 1: Strengthen collaborative decision making</th>
</tr>
</thead>
</table>
| 1. Develop a discussion paper on the nature and benefits of collaboration that this Strategy envisages, including the broader participation of administrative and technical staff in academic administration. Specify timelines and appropriate measures or other indicators of “success”.
| 2. Create Faculty-level opportunities to discuss and develop support for the concepts outlined in the paper:
  - beginning with the Dean, and Chairs and Directors group, followed by
  - discussions involving a cross-section of members of administrative and academic managers and technical and administrative staff
| 3. In each discussion, agree on specific steps to be taken to foster the type of collaboration, and reap the benefits, that are outlined in the discussion paper.
| 4. Request that each department conduct similar discussions.
| 5. According to target dates included in the discussion paper, review progress, particularly against the measures and indicators of “success”. Update the discussion paper to indicate progress made and yet to be accomplished, and then repeat the cycle until the desired level of collaboration becomes the norm.

<table>
<thead>
<tr>
<th>Strategy 2: Hold events to bring staff together</th>
</tr>
</thead>
</table>
| 1. Identify events to be held ‘cross-Faculty’ similar to Faculty Day, Annual Picnic, and Celebrating Success Awards Presentations. The next Faculty event may be a charity team-building event, organized by Business Management Services.
| 2. Canvass departments to compile a list of current activities being held locally. Promote these across the Faculty and support them to continue and grow.
| 3. Invite and encourage departments to participate in a Departmental open house event in which they profile their activities for the rest of the Faculty. This would be done on a volunteer basis, say one event per year, and will be coordinated by the CAO.
| 4. Continue to encourage the formation of ‘expert communities’:
  - such as already exist (eg: Student Counselors Group, Business Officers Group, External Liaison Group)
  - to be led by the senior central person (Registrar, CAO, Executive Director Communications), and
  - to meet regularly meet to share best practices
  Promote these groups and encourage others to develop.
| 5. Provide opportunities for staff to express ideas for new events and constructive feedback on existing events. |
### Strategy 3: Use technology to share information

1. Design a cross-Faculty process to appropriately identify equipment, staffing and training that this Strategy requires.

2. Call for ideas from staff and vendors, investigate other best practices, and otherwise review potential approaches to this Strategy (including existing technology such as Blackboard and Docushare). Create a short list of feasible approaches.

3. Convene a committee to select the best approach.

4. Run an RFP process to select a vendor (to supply and/or provide service) to implement this Strategy. This may include the provision of training.

5. Review the result regularly to ensure the supplied approach continues to meet the needs of staff.

### Strategy 4: Create documents and statements to strengthen corporate memory and facilitate appropriate standardization

1. Develop and apply a process to encourage and facilitate the continuous protection of corporate memory within and across all departments and units of the Faculty.

2. For information at a Faculty-wide level, consult with affected stakeholders to discuss and determine what documents and other information is required to provide service excellence, guidance on helpful formats and media, and a sense of relative priorities.

3. Assign responsibility for developing specific information.

4. Obtain appropriate stakeholder feedback in the process of developing draft material and finalizing it.

5. For each type of information, develop and apply appropriate restrictions on who has access to such information.

6. Make the information appropriately available.

7. Develop measures of success of this initiative.

### Strategy 5: Allocate resources to provide computing tools to facilitate service excellence

1. Consult with C&D to develop a common understanding of the strengths and weaknesses of administrative computing tools in effectively and efficiently supporting the academic mission, such as, for example, in scheduling, space allocation, health and safety, and the support of learning.

2. Develop an overall process to prioritize, resource and meet essential needs.

3. In carrying out these steps, seek synergy across the Faculty by:
   - assessing and addressing priorities among departments, not only within departments, and
   - developing joint solutions that appropriately share computing tools among departments, such as maximizing buying power and training efficiencies through jointly used technologies.
### Strategy 6: Enhance orientation and training

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Develop an orientation with a Faculty-wide perspective. To do so, assign HR to develop a comprehensive “Welcome to Engineering” event for new faculty and staff to provide general context to new employees such as where they fit in their department, the Faculty, and the University.</td>
</tr>
<tr>
<td>2.</td>
<td>Consider, and address as necessary, an ongoing “reorientation” program to advise and update both faculty and staff regarding changes in the Faculty’s context, programming and processes.</td>
</tr>
<tr>
<td>3.</td>
<td>Develop and implement, within each department, appropriate job-specific orientations.</td>
</tr>
</tbody>
</table>
| 4. | Develop a process to:  
  - identify the competencies required to provide service excellence  
  - identify training needs based on required competencies, and  
  - provide appropriate training  
  Learning opportunities should include, but not necessarily be limited to, participation in formal training courses, and could include participation in relevant conferences. Learning activities should make appropriate use of existing university resources and programming. |
| 5. | Investigate the potential benefits of and an appropriate approach to implement mentoring. |
| 6. | Conduct “stay interviews” to ensure retention of our excellent staff. |

### Strategy 7: Quantify and apply performance metrics

<p>| | |</p>
<table>
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<tbody>
<tr>
<td>1.</td>
<td>Assign responsibility to a cross-departmental team to oversee the implementation of the strategy.</td>
</tr>
</tbody>
</table>
| 2. | Design and implement a consultative approach to:  
  - quantify the metrics identified in this plan, and  
  - tailor the quantifications to the peculiarities of each department, where appropriate, or otherwise adopt standard quantifications across the Faculty |
| 3. | Develop processes to:  
  - Apply metrics to the various aspects of our operations,  
  - monitor results against metrics, and  
  - apply the findings in the acknowledgement of progress and success, and the continuous improvement process. |
We ended Faculty Day with a conversation that reflected on the work we had accomplished together that day. The following are highlights of that conversation.

All of our proposed strategies are very relevant to achieving our objective of Excellence.

The need to improve communication is fairly pervasive, as is the need to improve training.

As we anticipated, there is significant crossover, being strategies that span across several gaps, address many roadblocks simultaneously and cross over many work units. This reveals that there are important opportunities for single solutions to multiple problems or objectives, which re-emphasizes the synergistic benefits of enhancing collaboration and working more closely together rather than “in silos”.

However, enhancing collaboration can be a challenge. With the ever-expanding size of U of T, it is easy to work within our own areas and forget to collaborate across the Faculty and with others. These Strategies strongly indicate the need for more effort among us to become aware of what other units do and to seek ways to enhance effectiveness through enhanced collaboration.

In the midst of rapid change, the evolution and improvement of our processes need to be managed (in an intentional way) continuously.

Some of the process improvements implied in these Strategies, and those we identified described as “best practices” (Appendix “D”), require an investment in management tools, especially software.

This has been a valuable experience. We should conduct exercises like this more often.
### Results of Analysis of our current situation

<table>
<thead>
<tr>
<th>Topic</th>
<th>Reasons to Celebrate</th>
<th>Possible Causes of Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positioning</strong></td>
<td>• International rankings&lt;br&gt;• High expectations&lt;br&gt;• Open door policy&lt;br&gt;• Technology kept up to date&lt;br&gt;• Encouraging innovation&lt;br&gt;• Staff awards program&lt;br&gt;• Positive messaging&lt;br&gt;• Effective branding&lt;br&gt;• Ambitious targets&lt;br&gt;• PEY expanding&lt;br&gt;• Increased student standards and retention&lt;br&gt;• Track One</td>
<td>• Limited resources (money, space, people)&lt;br&gt;• Quality of space&lt;br&gt;• Pessimistic view/attitude&lt;br&gt;• Too focused on backlogs&lt;br&gt;• Don’t see the whole process; only the small part of the process that involves us&lt;br&gt;• Lack of understanding of Faculty process&lt;br&gt;• Heavy workloads&lt;br&gt;• Lack of opportunity for planning, training or orientation</td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td>• “CelebrateSuccess” awards&lt;br&gt;• ECE Community Connection: faculty informing others regarding their research&lt;br&gt;• Efficient team work&lt;br&gt;• New, streamlined, internal reservation booking system, linked to calendars for all to see&lt;br&gt;• Internal website</td>
<td>• Disconnect between faculty and admin staff in terms of accomplishments&lt;br&gt;• Faculty technology is further ahead&lt;br&gt;• Different email addresses for faculty and administration&lt;br&gt;• Located in 5 different buildings&lt;br&gt;• State of tools, especially computers</td>
</tr>
<tr>
<td><strong>Student Experience</strong></td>
<td>• Biweekly meetings with student groups ensure that their expectations are met&lt;br&gt;• Machine shop emphasizes students first to ensure good experience&lt;br&gt;• Ombudsman in one department&lt;br&gt;• Students sit on department and faculty committees to ensure education needs are met&lt;br&gt;• Continuously evaluating at staff meetings re: “lessons learned”&lt;br&gt;• Programs offered, such as study groups, pre-admission courses, employment, etc.&lt;br&gt;• We provide students with several options for getting in touch</td>
<td>• Inadequate information sharing&lt;br&gt;• Inadequate resource sharing (RMS)&lt;br&gt;• Needs a hybrid of centralized and decentralized structure&lt;br&gt;• Constraints on resources (people, time, etc)&lt;br&gt;• Lack of technical equipment to ease processes&lt;br&gt;• Some lack of understanding of students’ needs</td>
</tr>
<tr>
<td>Topic</td>
<td>Reasons to Celebrate</td>
<td>Possible Causes of Gaps</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Collaboration | • Hosting a focused Faculty Day  
• Defining the Mission Statement of the organization  
• Developing institutional memory  
• Availability of central technical data  
• Supportive environment, helping each other during peak times  
• Monthly meetings/information exchanges  
• Allowing time and flexibility to celebrate success  
• Out-of-office meetings | • Limited capability website  
• Language barriers  
• Heavy workloads  
• Some unclear roles/functions  
• Possessiveness of jobs  
• Stress levels  
• Interdepartmental differences  
• Delays in information transfer  
• Email overload  
• Some disinterest in working as a team  
• Lack of understanding of other roles, therefore not knowing where collaborations can be optimized  
• Highly specialized positions and roles |
| Resource Allocation | • New budget model, rewarding departmental enrollment  
• ECE linking faculty and staff through meetings  
• Managing space effectively in a constantly changing environment with constantly changing space  
• Finding ways to recognize staff through administrative awards with minimum cost  
• Collaboration/centralized purchasing sharing discount  
• Collaboration among researchers and departments through the new engineering "MINNS"  
• Faculty wide newsletter  
• Understanding the priorities of the Faculty  
• Transparent and functional methods for establishing priorities  
• Understanding the big picture, including what other programs/departments do | • Silos/empire building (eg: room bookings)  
• Duplication across departments-processes reinvented rather than shared  
• Supply and demand (students) shift focus from department to department from year to year  
• Decentralization  
• May not have resources to fulfill all priorities  
• Some difficulty navigating how/where to access some resources  
• Conflicting agendas  
• Communication breakdowns |
| Training | • External and in-house training offered multiple times a year  
• Human resources | • While offered multiple times, some training is not convenient relative to workload peaks  
• In an ever changing highly technological environment, courses are not always up to date |
| Outreach | • Our reputation as number 8 in the world  
• Our faculty has industry ties  
• Our annual report highlights our success to our external stakeholders  
• Faculty Advancement has identified key prospects/alumni for giving to the alumni | • Media: rigid outdated perception of engineering  
• Size of our alumni group  
• Limited resources (eg: writers to make the case for support)  
• Industries suffering economically  
• Advancement (fund-raising) has not been a priority for all departments  
• Duplication of what the departments are doing vs. Faculty  
• Out of date contact information for alumni |

Participants continued their analysis with Proposed Recommendations in the tables that follow.
## Proposed Recommendations to Improve the Current Situation

<table>
<thead>
<tr>
<th>Position of Excellence (includes Training)</th>
<th>Culture of Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff Recognition of Success</strong></td>
<td><strong>Define Problems and Metrics</strong></td>
</tr>
<tr>
<td>Staff recognition: feedback, engagement and awards</td>
<td>Prioritize and devote resources (time, money) to innovation</td>
</tr>
<tr>
<td>Building community relationships: “happy hour”</td>
<td>Celebrate leadership and innovation</td>
</tr>
<tr>
<td>Public recognition of success</td>
<td>Aim for clearly defined and measureable problems</td>
</tr>
<tr>
<td>Positive reinforcement</td>
<td>Ensure diversity in the workplace</td>
</tr>
<tr>
<td>Recognition and awards (micro level and macro level)</td>
<td></td>
</tr>
<tr>
<td>Diversity of staff</td>
<td></td>
</tr>
<tr>
<td><strong>Improve Input</strong></td>
<td><strong>Improve Training</strong></td>
</tr>
<tr>
<td>Soliciting suggestions from staff</td>
<td>More Faculty Days!</td>
</tr>
<tr>
<td>Inter-department, interdisciplinary cooperation, collaboration, coordination and mentorship</td>
<td>More resources and training</td>
</tr>
<tr>
<td>More employee input, timing topic delivery eg. Mid-month vs. first and end of month</td>
<td></td>
</tr>
<tr>
<td>Ensure courses are relevant and up to date, especially important for high tech equipment and skills</td>
<td></td>
</tr>
<tr>
<td>Centralized website: Interdisciplinary, feedback forum for courses</td>
<td></td>
</tr>
<tr>
<td><strong>Further Training Opportunities</strong></td>
<td><strong>Improving Communication &amp; Collaboration</strong></td>
</tr>
<tr>
<td>Formal orientation to faculty (big picture)</td>
<td>Empower staff to present ideas (suggestion box, email suggestions)</td>
</tr>
<tr>
<td>Job shadow and/or secondments</td>
<td>Core communication network between faculty and staff with contact information readily available 24x7</td>
</tr>
<tr>
<td><strong>Optimize Processes</strong></td>
<td></td>
</tr>
<tr>
<td>Manual/process on intranet</td>
<td></td>
</tr>
<tr>
<td>Document processes</td>
<td></td>
</tr>
<tr>
<td><strong>Define Problems and Metrics</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Improve Training</strong></td>
<td></td>
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<tr>
<td><strong>Culture of Excellence</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Improving Communication &amp; Collaboration</strong></td>
<td></td>
</tr>
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<td><strong>Define Problems and Metrics</strong></td>
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<tr>
<td><strong>Improve Training</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Culture of Excellence</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Proposed Recommendations to Improve the Current Situation, continued

<table>
<thead>
<tr>
<th>Student Experience</th>
<th>Collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Develop a Culture of Student Service</strong></td>
<td><strong>Share Information</strong></td>
</tr>
<tr>
<td>Uniformity of procedures</td>
<td>Systems and procedures training</td>
</tr>
<tr>
<td>Technology current (website) and user friendly</td>
<td>Use information to enable strategic connections</td>
</tr>
<tr>
<td>Technology for easier access to information</td>
<td>Meeting often to establish current roles and projects</td>
</tr>
<tr>
<td>Interdepartmental collaboration and communication</td>
<td>Create a faculty wide intranet creating interdepartmental collaboration</td>
</tr>
<tr>
<td>Better access to faculty members</td>
<td>More workshops and professional days</td>
</tr>
<tr>
<td>Audit current communications processes and refine, enhance and improve (quality vs. quantity)</td>
<td>Encourage positive attitude toward collaboration and sharing</td>
</tr>
</tbody>
</table>

| **Increase Communication & Collaboration** | **Facilitate Communication** |
| Spend more time with students face to face and in virtual environment | Short face-to-face subject area meetings to share information and needs |
| Obtain feedback using student friendly technology | Host open houses between departments |
| Continuous re-evaluation of processes and goals | Charity team building events |

| **Obtain & Provide Feedback & Evaluation** | **Provide Networking Opportunities** |
| Polling surveys and questionnaires for feedback | Create a faculty wide intranet creating interdepartmental collaboration |
| Act on feedback from students | More workshops and professional days |

**Develop philosophy for serving students that recognizes service vs. education delivery**

**Provide ongoing training to student services staff**

**Use Technology More Effectively**

**Integrate technology for easier access to information**

**Expand online process to reduce reliance on “counter” service**

**Better access to faculty members**

**Polling surveys and questionnaires for feedback**

**Audit current communications processes and refine, enhance and improve (quality vs. quantity)**

**Act on feedback from students**

**Integrate technology for easier access to information**

**Interdepartmental collaboration and communication**

**Continuous re-evaluation of processes and goals**

**Meeting often to establish current roles and projects**

**Create a faculty wide intranet creating interdepartmental collaboration**

**More workshops and professional days**

**Encourage positive attitude toward collaboration and sharing**
### Proposed Recommendations to Improve the Current Situation, continued

<table>
<thead>
<tr>
<th>Resource Allocation</th>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resource Mining</strong></td>
<td><strong>Outreach</strong></td>
</tr>
<tr>
<td>Meetings: what did we learn?</td>
<td>Comprehensive alumni database</td>
</tr>
<tr>
<td>Ways of getting input from different areas (what works and what doesn’t work)</td>
<td>Improved access to information: faculty website, department websites</td>
</tr>
<tr>
<td>Look outside our own faculty for best practices/ networking—within UofT and outside; increase collaboration and communication among departments</td>
<td>Celebrating our successes through stories of success: Story library</td>
</tr>
<tr>
<td>More faculty days like this</td>
<td>New open house events: Public, media, alumni</td>
</tr>
<tr>
<td>Formal networking opportunities</td>
<td>Internal directory for industry contacts</td>
</tr>
<tr>
<td><strong>Resource Integration</strong></td>
<td><strong>Resource Sharing</strong></td>
</tr>
<tr>
<td>Integration of data systems</td>
<td>Faculty wide web portal for resources and tools</td>
</tr>
<tr>
<td>Inter-departmental linkages across functions</td>
<td>One stop shop to access resources (centralized web)</td>
</tr>
<tr>
<td>Share resources and expertise among departments</td>
<td>Improve communication between and within departments (know who does what)</td>
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</table>

**Resource Allocations:**
- **Resource Mining**
  - Meetings: what did we learn?
  - Ways of getting input from different areas (what works and what doesn’t work)
  - Look outside our own faculty for best practices/ networking—within UofT and outside; increase collaboration and communication among departments
  - More faculty days like this
  - Formal networking opportunities

**Resource Integration:**
- Integration of data systems
- Inter-departmental linkages across functions
- Share resources and expertise among departments

**Resource Sharing:**
- Faculty wide web portal for resources and tools
- One stop shop to access resources (centralized web)
- Improve communication between and within departments (know who does what)
# Reconciliation of Academic Planning Framework, Faculty Day Recommendations and the Seven Strategies

<table>
<thead>
<tr>
<th>Source of Topics</th>
<th>Topics</th>
<th>Recommendations from Faculty Day</th>
<th>Seven Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. Strengthen collaborative decision-making</td>
<td>5. Provide tools and equipment to facilitate service excellence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Hold events to bring staff together</td>
<td>6. Enhance orientation and training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Use technology to share information</td>
<td>7. Quantify and apply metrics</td>
</tr>
<tr>
<td>Position of Excellence</td>
<td>Staff Recognition of Success</td>
<td>√</td>
<td></td>
</tr>
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<td>Culture of Excellence</td>
<td>Improve Input</td>
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<td></td>
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<td></td>
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<td></td>
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<tr>
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<td></td>
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<td></td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Resource Sharing</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Added via Faculty Day</td>
<td>Training</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Outreach</td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>
Responses to *Academic Planning Framework* Focus Questions

Introduction

This appendix contains responses to the focus questions of the sections of the *Academic Planning Framework* that are pertinent to the roles and functions of technical and administrative staff.

Positioning

**Contextual Statement**
The following Vision, Mission and Key Messages emerged from past initiatives and a recent comprehensive consultation. Further discussion at a meeting of Chairs and Directors identified opportunities for increased clarity and stronger statements.

**Vision**
The Faculty of Applied Science and Engineering will be a leader among the world’s best Schools of Engineering in its discovery, creation and transfer of knowledge and technology through teaching and research.

**Mission**
1. To discover and share knowledge with students by offering undergraduate, professional and graduate degree programs of the highest quality in an environment that provides immersion in world-class research and ensures a supportive student experience.
2. To ensure our students are equipped with the leadership skills, communication skills and global awareness required by the engineering profession and by society in general.
3. To discover new knowledge and to contribute to society through advanced research, innovation and technology transfer.
4. To realize an exemplary degree of citizenship and ethical behaviour among our faculty, staff, alumni and students.

**Key Messages**
The world’s cultural and commercial convergence makes for an unprecedented richness in opportunity for Engineering. The University of Toronto Faculty of Applied Science and Engineering pursues this important opportunity by enabling our community of today’s students and tomorrow’s Engineering leaders to build a stronger global society.

We prepare well-rounded future world leaders who flourish in the breadth and depth of our challenging, inter-Faculty academic and Co- and Extra-curricular Engineering programs.

Our longstanding tradition and spirit of innovation in Engineering leads us to excel at integrating creative techniques and ideas from dynamic, evolving sources to catalyze meaningful new research directions that address the needs for building a stronger global community.

**Focus Questions**
1. How does your Unit reflect and contribute to the aspirations outlined above?
2. Which universities do you consider to be “equivalent peer” and “aspiring peer” programs/units to yours?
3. How do you envision being unique and exceptional compared to your peer programs?
4. How can your Unit enhance your contribution to:
   - making this positioning (above) our reality?
   - being exceptional and unique relative to your peer programs elsewhere?
Response

1. Administrative and technical staff are very proud of our Faculty’s high ranking among the world’s leading schools of engineering. We believe that this pride shows through in many ways, such as, for example, in:
   - Our comments about the significance of our Faculty conducting, and continuously maintaining, this academic planning process (page 4)
   - The similarities and synergy of our own positioning, as expressed in our concepts of Mission/Purpose (page 5) with the positioning contextual statement shown above
   - our aspirational Vision of Excellence (page 5)
   - our successes/reasons to celebrate (pages 17 and 18), and
   - the energy and dedication to the success of this Faculty that we demonstrated throughout this planning process, and especially as approximately 140 of us met and spent an entire Faculty Day developing almost all of the material contained in this document.

2. N/A

3. We envision being unique by setting and pursuing high technical and administrative standards together.

4. Administrative and technical staff will enhance our contribution to making our concepts of Mission/Purpose and Vision, and thus our “positioning” a reality by:
   - adopting and applying our concepts of Mission/Purpose, Vision, Metrics and seven Strategies, both across the Faculty and where we work within each unit, and
   - finalizing and implementing Action Plans for each of the seven Strategies, again both across the Faculty and within each unit.
APPENDIX B: RESPONSES TO ACADEMIC FRAMEWORK FOCUS QUESTIONS

**Culture of Excellence**

**Contextual Statement**
According to feedback from participants in the Positioning Initiative, one component of a culture of excellence is a focus on innovation in teaching and research.

Teaching excellence involves effectively imparting knowledge to students, developing innovative course materials, and offering opportunities for learning in an engaging and supportive environment. It also involves contact with students to ensure they understand the material, are being challenged to an appropriate level, and are acquiring the necessary engineering tools and skills as well as the broader professional skills required to effectively use them in their future careers.

Research excellence redefines a field, creates new engineering devices or techniques, and impacts innovation and industry. Research excellence is indicated by citations, awards, honours, keynote speeches, books and the application of the research in creating a new patent process, product, service or business.

Effective technical and administrative support staff contribute to a culture of excellence.

In a culture of excellence, the Faculty is a place where the entire community enjoys pursuing excellence in everything we choose to do, whether research, teaching, service and/or learning.

**Focus Questions**
1. *In what ways does your Unit reflect, contribute to and promote our culture of excellence?*
2. *What would you add or modify in this description?*
3. *How do you pursue innovative ways of teaching?*
4. *How do you foster students’ own pursuit and achievement of excellence?*
5. *How do you encourage the pursuit of research excellence?*
6. *How does your Unit promote our culture of excellence?*
7. *What future steps will your Unit take to further pursue our culture of excellence?*

**Responses (see also Collaboration and Outreach – page 30)**
1. Administrative and technical staff reflect, contribute to and promote a culture of excellence through the work that we do day in and day out to support members of faculty, teaching, research, student learning, the student experience, efficiency and the responsible use of resources. Examples of specific successes (“reasons to celebrate”) appear on pages 17 and 18.
2. We propose no modifications to the statement. However, we provide embellishments to the phrase, "effective technical and administrative support staff contribute to a culture of excellence” by way of, for example:
   - Our concepts of Mission/Purpose (page 5)
   - Our Vision of Excellence (page 5)
   - Our Proposed Metrics Of Excellence (page 6)
   - The benefits of our work to our key stakeholder constituencies (page 7), and
   - Examples of our successes (pages 17 and 18).
3. Most of us contribute to the quality of teaching indirectly. Many of us are directly involved in students’ learning. We contribute to the quality of teaching and learning in many ways. The most significant aspects of this plan toward enhancing innovative learning are:
   • our dedication to our concepts of Mission/Purpose (page 5)
   • our pursuit of our Vision of Excellence (page 5), and
   • our more timely involvement in plans and decisions that affect student learning and require significant involvement of administrative or technical perspective and expertise, such as through the implementation of Strategy #1 (page 10).

4. See answers to the questions above.
5. See answers to the questions above.
6. See answers to the questions above.
7. See answer to question #3.
**Educating Future Engineers**

**Contextual Statement**
In 2008, our Faculty formed a Task Force on Globalization and Engineering that considered the Faculty’s education and research missions in light of the potential responses to globalization trends and global challenges. The Task Force concluded the following attributes of the future engineer:

• is an expert in a specific field, and is also comfortable in many engineering disciplines and able to work in an interdisciplinary way
• is a global collaborator, has knowledge and/or appreciation of culture and language, can communicate across language and cultural differences
• is knowledgeable in collaboration techniques and information technology
• is a creative problem solver
• adapts to new situations, deals with complexity and is skilled at systems-thinking
• understands the broad context of engineering work, including cross-disciplinary aspects and the business, environmental and social implications within a global context
• understands sustainability efforts and factors environmental impact and energy use characteristics into all aspects of the work
• has a well-developed sense of social responsibility and ethics with an international perspective
• is entrepreneurial and is prepared to work with a varying level of resources and in a broad range of organizations (national and international)

We recognize the emergence of leadership as a desirable characteristic of the future engineer, as highlighted in the recent accreditation and degree-level expectations documents. (CEAB: “…an ability to work effectively as a team member and a leader in teams…” Degree-Level Expectations: “…leaders in society in developing solutions to the most pressing problems…”) The Task Force on Engineering Leadership Development Education recently described the leadership characteristics desirable in the future engineer, which are complementary and additive to the attributes listed above:

• able to vision from a grounding in personal and organizational values
• practiced at translating personal passions into purposeful action
• skilled at communicating with, and working in, teams, groups, and organizations that are collaborative and diverse
• recognizes that effective leadership extends from a grounding in understanding self
• connects the practice of leadership to positive social change

**Focus Questions**
**Both Undergraduate and Graduate**
1. **How does your Unit reflect this description and contribute to the development and education of the future engineer?**
2. **What more can your Unit do to realize this vision?**
3. **How does your Unit engage in national and international activity?**
4. **How do you draw upon the vast international experience of our faculty, staff and students?**

**Response**
Administrative and technical staff contribute to the development of the Future Engineer indirectly, and primarily through our:

• Positioning and pursuit of excellence (page 23)
• Pursuit of a culture of excellence (page 25)
• Contribution to the student experience (page 28), and
• Collaboration and outreach (page 30).
Student Experience

Contextual Statement
Participants in the recent Positioning Initiative identified unique contributing factors inherent at the University of Toronto, such as: the breadth of programming within the Faculty and across the University – that we are not a "niche school", rather we have expertise across many areas; student activities available in the Faculty and across the University; and multicultural advantages in the diversity of the student population and of the communities within the City of Toronto; and a strong, vital industry base here at our doorstep.

Many identified that, particularly for undergraduate students, the "commuter culture" of U of T is a factor that undermines the feeling of "community".

Focus Questions

** Both Undergraduate and Graduate
1. How does your Unit define excellence in student experience?
2. How do you gauge the quality of student experience?
3. How do you promote excellence in student experience both in the classroom and outside the classroom?
4. As part of the student experience, how could your Unit promote and provide qualities such as: Innovation, Leadership, Entrepreneurism, Outreach, Influence, others (please specify)? For example, which clubs/activities (e.g. LOT, Solar Car, EWB, NSBE, EngSoc, etc.) do you plan to focus on nurturing?
5. What else will you do to enhance the student experience that promotes community-wide and society-wide impacts?

Responses

1. Technical and administrative staff will adopt the definition of excellence in the student experience that emerges from this academic planning process.
2. We will adopt the measures and indicators of the quality of student experience that emerges in the academic plan.
3. We promote and contribute to the quality of the student experience through the work that we do day in and day out to support members of faculty, teaching, research, student learning, the student experience, efficiency and the responsible use of resources. Examples of specific "successes" appear on pages 17 and 18.
4. We will enhance our contribution to the quality of the student experience through:
   • our dedication to our concepts of Mission/Purpose (page 5), and
   • our pursuit of our Vision of Excellence (page 5)
5. We will be guided by and support initiatives that emerge in the academic plan that promote community-wide and society-wide impacts.
Research Foci

Contextual Statement

We have adopted four areas as high priority areas for research:
- Bioengineering
- Energy, Environment and Sustainability
- Information & Communication Technology
- Nanotechnology

Focus Questions
1. What are your Department or Institute’s research strengths?
   • In these four areas of research, and
   • In other areas of research?
2. Based on your assessment and scope of research activities, how does your Department or Institute intend to focus over the next five to seven years in:
   • These four area of research, and
   • Others, such as areas of strength that are worth continued emphasis?
3. How is your Department or Institute identifying future research areas? What do you anticipate those to be? What process do you use?
4. How does your Department’s or Institute’s research influence and/or contribute to your teaching?
   • undergraduate
   • graduate

Response
Our contribution to the breadth and quality of research will be indirect and accomplished through our:
- fulfillment of our concepts of Mission/Purpose (page 5), and
- pursuit of our Vision (page 5)
Research Collaboration, Outreach and Influence

**Contextual Statement**
Participants in the recent Positioning Initiative provided the following input regarding research collaboration, outreach and influence:

We have professors from around the world and a diverse student base that helps us bring in international views which encourages excellence on a world scale, as well as locally. Our diversity helps in giving different perspectives and prepares students for the world. Within our Faculty, we can connect to areas and to people in an extraordinarily diverse environment unique to the City of Toronto.

We have developed strong inter-Departmental/Institute and inter-University research collaborations. We continue to soften the boundaries between the Departments and Institutes within the Faculty and between our Faculty and other Faculties at U of T to encourage and pursue cross- and inter-disciplinary knowledge and innovation.

Outreach develops our relationships within the University community and with the high-school student and parent populations in particular. Outreach aims to educate the public about the importance of our Faculty and to promote the University of Toronto and Engineering as a discipline among students and parents locally, nationally and internationally.

Influence aims to impact and shape public policy, high-school curricula, governmental educational, research funding priorities, and university-industry partnerships.

There are many ways for a Faculty to be influential, such as: transforming knowledge into practical applications and business ventures; contributing engineering knowledge to public policy; collaborating with industry, influencing public opinion and government agencies; and garnering recognition for thought leadership within the research field(s) and with the public.

**Focus Questions**
1. How does and can your Unit achieve excellence through research collaboration, outreach and influence?
2. What kinds and to what extent of influence does your Unit want to have and amongst whom?
3. What important ways will enhance your ability to achieve that?

**Response (see also Culture of Excellence – page 25)**

Administrative and technical staff considered this topic as collaboration and outreach with respect to all of our activities.

We entered this planning process with collaboration and outreach being topics on our agenda. However, we found it very insightful that collaboration turned out to be much more than one of several topics. It clearly emerged as the primary theme of almost all of our discussions during Faculty Day and since. The title of this report reflects our conclusion that the process of collaboration is the key driver of our pursuit of excellence.

Our goal to enhance the extent and quality of collaboration figures prominently among our seven Strategies. Strategies #1, #2 and #3 (page 10) address collaboration directly. Strategy #4 facilitates collaboration.

Our goal of Collaborating for Excellence requires the successful implementation of these Strategies.
Our discussion addressed the importance of collaboration at three levels:
- with one another, especially interdepartmentally,
- with students, and
- in partnership with members of faculty

Indeed, a recurring theme throughout all of our planning discussions, is our objective to be considered and involved with faculty in the spirit and practice of partnership as we collaborate in our collective pursuit of our academic mission and our pursuit of world-class excellence.

We believe that such partnership:
- is a very practical and necessary contributing factor to our:
  - creation of leading research
  - education of Future Engineers, and
  - maintaining and advancing our standing among the world’s leading schools of engineering, and
- is central to creating a culture of excellence, such as our Academic Planning Framework calls us to achieve.
Resource Allocation

Contextual Statement

The allocation of resources significantly influences our activities. Our commitment to academic and research excellence warrants matching infrastructure and resource allocations. The nature of public universities means that creative solutions must be found to meet the challenges in financial and resource allocations.

Focus Questions

1. How does the allocation of resources in your Unit foster:
   • Culture of Excellence
   • Quality of Teaching and other aspects of Student Experience?
   • Research foci and quality
   • Research Collaboration, Outreach and Influence

2. How could this be improved?

3. To demonstrate that we value, respect and pursue these qualities (listed above), how should your Unit allocate resources (including workloads) among:
   • Research
   • Teaching – excellence in the learning experience, and
   • Other?

Response

Administrative and technical staff contribute to effective resource allocation in two ways:
• Managing the resources that are at our disposal to carry out our role, and
• Managing the resources of the Faculty as a whole.

This latter role appears prominently in view of the concepts of our mission (page 5).

This document addresses resource allocation:
• directly through Strategy #5, and
• indirectly through the other Strategies and commentary.

For example, our plans to enhance collaboration and culture of excellence are designed to make better use of resources through more efficient and effective decision-making. In particular, Strategy #1, our goal to collaborate on decision making with academic managers, (page 10), has considerable potential to lead to a more effective, efficient and economical investment of resources in decisions and execution.
Priorities, Weaknesses and Implications

Contextual Statement
Planning has the most impact, not when it identifies everything we could do, but when it leads to a consensus on the most important things we intend to do, and our priorities. In academic planning, it is equally important to identify activities that may be nearing the end of their contribution.

Units are encouraged to consider and add areas in need of development not already identified within the Framework and specific to their Units. Academic Planning provides an important opportunity to identify weaknesses and consider ways to best address them. A starting point in transforming intentions into action and outcomes is to identify the practical implications of your planning.

Focus Questions

1. In each of the previous six categories (Positioning; Culture of Excellence; Educating Future Engineers; Student Experience; Research Foci; Research Collaboration, Outreach and Influence; and Resource Allocation), what are the five to seven most important actions your Unit plans to take (add or emphasize more) in your pursuit of excellence?

2. Consider activities in your Unit that may have come to or be nearing the end of their contribution, or are not as significant as some of the important future activities you have identified above. What will you do to “make way” for future activities? How does your Unit evolve and stay relevant? What will you discontinue and what will you emphasize?

3. What do you consider to be the most significant weaknesses of your Unit?

4. How, in addition to your responses to other topics in this document, do you plan to address them?

5. Given the aspirations of your Unit and areas to discontinue or de-emphasize, what are the implications over the next five to seven years for:
   • the research you conduct
   • the academic programming you provide
   • the graduate/undergraduate mix you pursue
   • the faculty you recruit

Responses

1. Throughout the process of planning, conducting and following up on Faculty Day, technical and administrative staff applied cycle after cycle of the Pareto Principle to progress from hundreds of pieces of data to the seven most important strategies for achieving administrative and technical excellence. These are the Strategies that appear on page 10.

2. So far, our planning discussions have not identified which activities to discontinue. Such discussions may be integral to implementing Strategy #6. Our proposed Process for Implementation (page 12) calls for examination of activities to discontinue as part of the implementation stage, to be conducted within each unit, and in partnership with our faculty colleagues, which is where and how conversations about discontinuing activities would be most appropriate and effective.

3. We addressed weaknesses in the context of the causes (pages 17 and 18) of the gap (page 8) between our Vision (page 5) and our situation today. From a larger perspective, we believe that the most significant obstacle to realizing our Vision and optimizing our contribution to the academic mission is the need for the spirit and practice of partnership with members of faculty, described on page 31.

4. We will address our weaknesses through the implementation of our seven Strategies (page 10).

5. The operational implications of the plans that we laid out in this document are difficult to forecast accurately, and will emerge and be addressed over time.
## VISION OF EXCELLENCE – DETAILS

The following chart provides details of our Vision of Excellence:

<table>
<thead>
<tr>
<th>Positive Work Environment</th>
<th>Demonstrating High Values</th>
<th>Quality Customer Service</th>
<th>Going Above and Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theme “A”</strong></td>
<td><strong>Theme “B”</strong></td>
<td><strong>Theme “C”</strong></td>
<td><strong>Theme “D”</strong></td>
</tr>
<tr>
<td>Attracting Top Notch Administrative and Technical Staff</td>
<td>Caring</td>
<td>Timely, responsive customer service, and anticipating needs</td>
<td>Setting standards as a team</td>
</tr>
<tr>
<td>Rewarding and supporting career paths</td>
<td>Ethical</td>
<td>Up-to-date knowledge and access to relevant information</td>
<td>Exceeding expectations</td>
</tr>
<tr>
<td>Personal empowerment, motivation and vision</td>
<td>Integrity</td>
<td>Good listening and communicating</td>
<td>Courageous, risk taking</td>
</tr>
<tr>
<td>Respect for the person, work, development &amp; health</td>
<td>Globally responsible</td>
<td>Empathetic</td>
<td>Flexible</td>
</tr>
<tr>
<td>Creative solutions are encouraged, recognized and rewarded</td>
<td>Transparent processes</td>
<td>Resourceful: Providing valuable and definitive answers to stakeholders</td>
<td>Involvement in setting and implementing policy</td>
</tr>
<tr>
<td>Fairness</td>
<td>Dedication to Excellence</td>
<td>Sharing best practices collaboratively</td>
<td>Model of skill, professionalism and effectiveness</td>
</tr>
<tr>
<td>Healthy and safe environment</td>
<td></td>
<td>One stop shop for students, faculty and staff</td>
<td>Contributing to effective inter-departmental collaboration (among students, faculty and staff)</td>
</tr>
<tr>
<td>No barriers to opportunity or success</td>
<td></td>
<td>Clients’ needs are satisfied, goals are met; students feel well supported</td>
<td>Improving the resource base</td>
</tr>
<tr>
<td>Strong leadership</td>
<td></td>
<td></td>
<td>Approachable and friendly</td>
</tr>
<tr>
<td>Managerial excellence</td>
<td></td>
<td></td>
<td>Technology advances collaboration</td>
</tr>
<tr>
<td>A sense of community</td>
<td></td>
<td></td>
<td>Responsible</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Accountable</td>
</tr>
</tbody>
</table>
EXAMPLES OF “BEST PRACTICES”

Examples appear in no particular order, and are labeled (“A”, “B”, etc) merely for easy reference.

A. Assessing New Ideas against Overall Objectives

As new ideas arise, we immediately assess them against our unit's or project's overall goals and objectives. The new idea must be supportive of our overall direction in order to move forward. This helps us place “ends before means” and reduces the risk of a new and intriguing idea allowing us to drift away from our priorities.

B. Effective Collaboration

Once we adopt a new idea, we agree on the allocation of responsibilities among us, both those aspects each of us will do alone and those on which we will collaborate.

As the idea is executed, we maintain constant communication and collaboration via a variety of media such as MSN, Facebook, texting, pinging, etc.

C. Lunchroom Networking

We make deliberate use of our lunchroom for networking and informal information exchange.

D. Using On Line Web Tools

We enhance productivity and reduce the probability of error by collaborating and managing calendar events through on-line web tools such as Google docs, Google calendars, Meeting Wizard, etc.

E. Using a Common Contact Management Software

We use “single point of contact” software, in this case “Place Pro” that connects employers, administrators and students. Collaborating using a common database enhances timeliness (of information and action) and reduces the risk of error or omission.

F. Formalized PDF Request Form

To reduce the risk of service requests getting lost or not getting costed back to appropriate budgets, we created a “fillable” form in pdf format that gets exported (an automated process) into an Excel spreadsheet that is shared among those who require access to it.
G. Weekly 30-Minute Information Exchange

The team meets weekly, limited to 30 minutes, to bring team members up-to-date on current projects and shared issues.

H. Internal Department Website

We have an internal, central, website that contains photos and bios of all members, commonly used forms, frequently-used policies, practices, and templates, room bookings, POs, etc. This enhances efficiency for all staff and fast-tracks the learning and orientation of newcomers to our department.

I. A Common, Centralized Email Address for Students

Students are instructed to make their enquiries by using an email address that is shared by those who are providing service. Thus, all those who are in a position to respond have access to all requests in one place.

J. Dedicated Workstations

We assign a unique number to the workstations in our lab. At the beginning of the term, each student is assigned to a specific workstation. Given that students have a vested interest in the availability of their particular station, they tend to take care of them.

K. Weekly Capture and Exchange of “Lessons Learned"

Each week, members of the machine shop meet to discuss “lessons learned” from the past week. This helps prevent repetition of mistakes and facilitates “continuous improvement”.

L. Meetings – Staying On Topic

We have a bell at our meetings (similar to a hotel check-in bell). Whenever someone gets off topic, or begins “a side conversation”, anyone present may hit the bell. This reduced the length of our meetings by 75%.

M. Making Multiple Uses of Requested Information

Multiple information requests were replaced with single requests that addressed many different information needs. For example, a single request of faculty members can be used to inform the range and weighting of research activity, annual activity reports, awards co-ordination, etc. This both enhances efficiency and has led to the winning of additional awards based on more extensive information about existing research activity.