

LEADERS *of* TOMORROW

FACULTY OF APPLIED SCIENCE AND ENGINEERING, UNIVERSITY OF TORONTO



Summer/Fall 2009 Report

INTRODUCTION

Leaders of Tomorrow (LOT) continues to grow rapidly. The following report highlights activities in summer and fall semesters 2009. During this time 139 leadership events took place with 4366 student contacts. We'd like to take this opportunity to update you on the program's latest developments. We hope you will enjoy reading about our new initiatives and future directions.

A new graduate course entitled 'Cognitive and Psychological Foundations of Effective Leadership' (APS 1010) was launched this fall. A new certificate program entitled 'Self-Leadership: Leading from the Inside-Out' was also launched. LOT hosted the *New U Student Leadership Conference*, a conference for elected student leaders. A Summer Institute on Leadership Education was organized by LOT, in partnership with the Office of Student Life and the Office of Teaching Advancement. Two presentations on LOT were made at the University's Teaching and Learning Symposium.

The Leaders of Tomorrow Program is a Faculty-wide, comprehensive curricular and co-curricular student leadership development program supported by funding from the Provostial Academic Initiative Fund, 2006-2010. Our vision is: '*An engineering education that is a life-long foundation for transformational leaders and outstanding citizens.*'

HIGHLIGHTS AND NEW DEVELOPMENTS

Key highlights from the summer and fall 2009 include:

MULTI-INSTITUTIONAL STUDY OF LEADERSHIP

The Leaders of Tomorrow Program, in partnership with Student Life Programs, participated in a Multi-Institutional Study of Leadership coordinated by leadership scholar and practitioner, Dr. Susan Komives at the University of Maryland. The University of Toronto is the first Canadian university to take part in this highly regarded study. Four thousand engineering students were surveyed along with 1,500 students from New College. The University of Toronto had a 47% response rate, one of the highest among 103 participating institutions. The study explored the role of higher education in developing leadership capacities with a special focus on specific environmental conditions that foster leadership development. Results indicate both areas for growth and areas where Leaders of Tomorrow has succeeded in helping engineering students become better leaders.

NEW U STUDENT LEADERSHIP CONFERENCE

This summer, the New U Student Leadership Conference was spearheaded by Leaders of Tomorrow in collaboration with the Engineering Society and the Office of Student Life. Each year, elected students from various student unions and other councils from all three campuses have a unique opportunity to network, learn and enhance their leadership skills. The New U 2009 program included a variety of featured speakers, discussions and concurrent sessions that helped over 100 students build skills and connect with constituents, stakeholders, and other student organizations.

SUMMER INSTITUTE ON LEADERSHIP EDUCATION

The Summer Institute on Leadership Education was co-hosted by Leaders of Tomorrow, Office of Student Life and the Office of Teaching Advancement. The Summer Institute was an opportunity for University of Toronto leadership educators and enthusiasts to come together, to share best practices, and to reflect both on our work with students and on our own development as leaders. A network of leadership educators, both faculty and staff from Engineering, OISE, Management, Physical Education, Medicine, UTSC, and Student Life gathered for this day-long event. This institute provided an opportunity to ignite a cross-University dialogue on leadership education.

TEACHING AND LEARNING SYMPOSIUM

One of the central themes of this year's Teaching and Learning Symposium was leadership education. Two presentations were delivered by LOT: one highlighted the new Co-Curricular Leadership Certificate, and the other one built on our Curriculum Infusion Lecture Series. Leaders of Tomorrow: Graduate (LOT: G) also presented on the changing culture of engineering through leadership learning and practice.

APS 1010 COURSE

This fall, the new course APS 1010 'Cognitive and Psychological Foundations of Effective Leadership' was offered by Dr. Robin Sacks. Students explore current theories driving effective leadership practice including models of leadership, neurophysiological correlates of leadership and psychodynamic approaches to leadership. Students learn and apply skills including mental modeling, decision-making, teamwork and self-evaluation techniques. This course aimed at helping engineering students to gain practical skills that will enhance their impact as leaders throughout their careers.

SELF-LEADERSHIP CERTIFICATE: LEADING FROM THE INSIDE OUT

Our newest certificate, entitled 'Self-Leadership: Leading from the Inside Out', was offered in fall 2009. After four interactive workshops that focused on exploring personal values and motivations, increasing self-awareness, the importance of congruent living and developing comfort with risk-taking, students were able to create and articulate an authentic vision of their future as a leader. Having undergone the comprehensive visioning process, students developed tools to apply to their future visions. Experiential and drama-based activities encouraged students to step beyond their comfort zone, and an emphasis on self-reflection, both individual and group, led to greater awareness of personal strengths and areas for growth.

Students who participated in this certificate program completed a pre- and post-survey measuring its perceived effectiveness. Students were asked to indicate responses on a scale from one to seven (seven=highest). Results and testimonials are offered below:

Question	Pre-Survey Result	Post Survey Result
I have the skills to set personal goals that help me develop as a leader.	4.95	6.0
I have a clear sense of my leadership strengths and areas of improvement.	4.24	5.78
I know what my values are and I make choices that align with them.	5.62	6.39
I am confident articulating my vision to others.	4.29	5.69
I am skilled at critically reflecting on my development as a leader.	4.33	5.95

Testimonials from Certificate graduates:

'It has given me the opportunity to critically evaluate what skills, values and views I have (and which ones I don't have) that contribute to effective leadership. It has also given me the chance to practice risk-taking in a comfortable environment to develop the confidence to demonstrate it outside of my comfort zone'

'It has helped me realize what I value most, and shown me that there is the potential within me to be a leader – I just have to take the risk and have the courage to expose it'

'This certificate has introduced me to a new definition of leader, one that can be attained, envisioned and articulated. I have learned much about leadership and how it applies to my life.'

'This certificate helped me open up more of my inner self and value the leadership I have gone through as it made a better future.'

LEADERSHIP TRAINING DAY

A Leadership Training Day was held on Saturday November 14th, 2009. Organized by the Cross-Faculty Student Working Group, the day included two interactive workshops and an afternoon 'Dragon's Den' activity. The Second City Improv company facilitated a workshop entitled 'Getting Your Message Across' and Ellie Avishai lead a workshop on leadership styles and team dynamics. In the afternoon, students were asked to pick from three global issues: energy, healthcare and international development. In randomly assigned teams, they were given a case study and were tasked with proposing a solution to these global issues and incorporating lessons from the morning into a creative presentation to be delivered to a panel of judges. Presentation judges included professors, staff and alumni.

CURRICULUM INFUSION LECTURES

This fall, LOT offered curriculum infusion lectures to a broad student audience in numerous engineering departments. Facilitators included Dr. Robin Sacks, Annie Simpson, Professor Greg Evans and students from Leaders of Tomorrow: Graduate. Below is a list of Infusion Lectures delivered this fall:

Lecture	Course
Leadership and Citizenship	CME 368
Leading in Teams	CME 208
Leading in Teams	MSE 244
Leadership and Citizenship	CME 324
Leading in Teams	CIV 270
Engineering Leadership Lecture	APS111
Engineering Leadership Lecture	CHE308
Leading in Teams	MIE 350

CROSS-FACULTY EVENTS

The Cross-Faculty component of the leadership program includes support of leadership events across the Faculty and campus. In summer and fall 2009, this included:

- Facilitating Leadership Workshops at Success 101, a program for incoming first-year students
- Summer Institute on Leadership Education
- Coordinating the 10th Annual Student Leadership Conference – New U for 150 U of T student leaders in student and residence councils and societies
- Leadership Development workshops for Department Working Groups and LOT:G
- Leadership Development workshops for CHEM and MIE summer programs and for members of Women in Science and Engineering (WISE)
- Coordinating Undergraduate Engineering Research Day (UNERD)
- Orientation week – three sessions for incoming students on Faculty Day
- Leadership Development Series for Club Leaders (three workshops)

UPDATE ON DEPARTMENT / DIVISION PROGRAMMING

This summer and fall the Leaders of Tomorrow program operated in seven units: Chemical Engineering and Applied Chemistry, Mechanical and Industrial Engineering, Electrical and Computer Engineering, Materials Science and Engineering, Civil Engineering, the Division of Engineering Science, and Leaders of Tomorrow: Graduate. Events are chosen and organized by the Leaders of Tomorrow Student Working Group in each department/division. For details and a listing of all events please see the appendix.

DEPARTMENT OF CHEMICAL ENGINEERING AND APPLIED CHEMISTRY

The following LOT events took place in CHEM in summer and fall 2009:

- Leading Transformational Change Talk – David Colcleugh
- Self Leadership workshop – Annie Simpson
- Who Could You Be in the World workshop – Robin Sacks and Ellie Avishai
- Managing your Career – Nina Reilly
- Facilitating Groups – Annie Simpson
- Group Excursion to Lake Ridge, LEEF – High Ropes Activity
- Coaching and Mentoring Others – Anandhi Narayanan and Christiana Ens
- Sanofi Plant Tour
- Myers Briggs seminar – Elaine Preston
- Public Policy Talk – Professor Doug Reeve
- Alumni Breakfast
- First Year Lab Tours
- PEY Panel

DEPARTMENT OF MECHANICAL AND INDUSTRIAL ENGINEERING

The following LOT events took place in MIE in summer and fall 2009:

- LOT Introductory lunches
- Habitat for Humanity Build
- Emotional Intelligence and Leadership workshop – Annie Simpson
- Conflict Transformation workshop – Anitta Satkunarajah
- Start Now! Career Development workshop – Sheri Browne-Howe and Flo Zeng
- Volunteering at Downsview Park with Evergreen
- Rock Climbing Event
- September kick-off lunch
- Ace the Interview
- Globalization workshop – Professor Murray Metcalfe

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

The following LOT events took place in ECE in summer and fall 2009:

- LOT Introductory Welcome Lunches
- Peer Mentorship Program – Mentor’s Training Seminar, Time Management Seminar, Exam Study Tips Seminar
- Engineering Entrepreneurship series with speakers Avanindra Utukuri, Tony Lacavera, Cameron Series, Farhad Shafai
- Sushi Cook-off – United Way Fundraiser
- Networking 101 Workshop – Glen Matedeen

DIVISION OF ENGINEERING SCIENCE

The following LOT events took place in EngSci in summer and fall 2009:

- Visioning Retreat for Working Group
- First Year Orientation Day
- Debate Workshop

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

The following LOT events took place in MSE in summer and fall 2009:

- MSE LOT Kick Off Event
- MSE LOT Booth at MSE Clubs Day during Orientation
- Team Dynamics & Dodge ball Event

LEADERS OF TOMORROW: GRADUATE

Leaders of Tomorrow Graduate program expanded Faculty-wide last year. The following LOT:G events and seminars took place in summer and fall 2009:

- LOT Graduate Kick Off BBQ – With the LOT G Committee
- Maximizing Your Innovation Potential – Professor Brenda McCabe
- Media Relations – Liam Mitchell
- The Art of Coaching – Anandhi Narayanan & Christiana Ens (Celestica)
- Leading your Thesis – Professor Mark Kortshot
- Leadership 101: Introduction to Leadership – Val Cortes and Ian Simmie
- How to get your P.Eng – Manoj Choudhary, PEO
- Learning the Language of Success: Reading for Engineers – Prof. Doug Reeve

LOOKING AHEAD

TASK FORCE

Looking forward, we expect our program to continue evolving and growing so that it has even greater impact in future years. In the fall of 2009, a Task Force for Engineering Leadership Education was created with the following mandate:

1. To review progress of the development of engineering leadership education at UofT.
2. To review and report on leadership education in engineering at other universities.
3. To recommend structures, processes, and models for advancing engineering leadership education at UofT including: curricular, co-curricular, and extra-curricular activities and research.
4. To create a vision for engineering leadership that reaches engineering schools and the engineering profession across the country

NEW COURSE - APS 1011

In the upcoming year the Leaders of Tomorrow Program will be offering a third curricular course entitled 'Concepts and Applications of Authentic Leadership.' The course will be taught by Nick Evans, leadership trainer and coach, and Wayne Stark, management consultant. The course will engage students in thoughtful discovery and articulation of their personal leadership visions.

Thank you for your ongoing involvement and support with the Engineering Leaders of Tomorrow program.

This report has been co-authored by:

Annie Simpson, Assistant Director, Leadership Education
Professor Doug Reeve, Chair, Chemical Engineering and Applied Chemistry
Professor Greg Evans, Chemical Engineering and Applied Chemistry
Anitta Satkunarajah, Student Leadership Development Officer

Appendix

Appendix A: Event details by department and division.

Listed in the following order:

1. LOT Office total
2. LOT:G
3. Chemical Engineering
4. Engineering Science
5. Electrical and Computer Engineering
6. Mechanical and Industrial Engineering
7. Material Science and Engineering
8. Civil Engineering

Appendix B: Leaders of Tomorrow featured in print.

Article by Michael Mastromatteo appears in July/August 2009 issue of *Engineering Dimensions*.

LEADERS *of* TOMORROW

FACULTY OF APPLIED SCIENCE AND ENGINEERING, UNIVERSITY OF TORONTO

Summer 2009 and Fall 2009 Events organized, led or supported by the LOT Office

Total Student Contacts: 2371

** Student contacts also included in department totals*

Date	Event	No. of Participants
May 15	Chem Summer Program: Info Session	40*
May 29	Chem Summer Program: Self-Leadership Workshop	35*
June 3	MIE Summer Program Emotional Intelligence	30*
June 5-7	New U Leadership Conference	150
June 6	New U: Emotional Intelligence	19
June 10	Facilitation Workshop for TETRA	15
June 11	Women's Leadership Meeting	9
June 18	U of T Summer Institute on Leadership	60
June 19	Chem Summer Program: Facilitation Skills	35*
July 7	Women's Leadership Meeting	6
July 22	LOT:G BBQ	200*
August 6	Poet in Community Workshop for Women in Engineering	7

Date	Event	No. of Participants
August 13	UnERD Conference	120
August 25	Facilitation Workshop for Club Leaders	18
August 25	Dean's Lunch Pre-Meeting	16
August 26	LOT lunch with the Dean	20
September 1	Cross Faculty Working Group Retreat	20
September 9	Faculty Day Session 1	51
September 9	Faculty Day Session 2	53
September 9	Faculty Day - Women's Leadership Event	25
September 16	MIE Working Group Meeting	10*
September 17	Cross-Faculty Working Group Meeting	15
September 19	Certificate Make-Up Session	2
September 21	APS 501 – Facilitating Groups	38
September 22	Curriculum Infusion Lecture CME 368 Leadership and Citizenship	57
September 23	Certificate 2 – Workshop #1	31

Date	Event	No. of Participants
September 24	Civil Engineering Student Working Group Meeting	6*
September 30	Cross-Faculty Working Group Meeting	13
September 30	Certificate 2 – Workshop #2	27
October 1	Drew Dudley - Event Planning Session	19
October 5	APS 501- 'Myers-Briggs' seminar	38
October 6	Curriculum Infusion Lecture CME 208 Leading in Teams	21
October 7	Certificate 2 – Workshop #3	30
October 8	Curriculum Infusion Lecture MSE 244 Leading in Teams	53
October 13	Curriculum Infusion Lecture CHE 308 Engineering Leadership	30
October 14	Certificate 2 – Workshop #4	30
October 15	Cross-Faculty Working Group Meeting	9
October 21	Cross-Faculty Working Group Meeting	3
October 26	APS 501: Discover Your Personal Mission	38

Date	Event	No. of Participants
October 29	Cross-Faculty Working Group Meeting	10
October 30	Curriculum Infusion Lecture CME 324 Leadership and Citizenship	28
November 11	Awaken the PowHer: Workshop for Women in Engineering	21
November 14	Leadership Training Day	35
November 16	MSE: Team Dynamics & Dodge ball	29*
November 16	Curriculum Infusion Lecture CIV 270 Leading in Teams	50
November 16	APS 501 – Emotional Intelligence	38
November 25	Cross Faculty Working Group Meeting	7
December 1	Emotional Intelligence for WEE- Women Empowered in Engineering	20
December 2	Presentation to Chairs and Directors	10
December 4	Curriculum Infusion Lecture APS 111 Engineering Leadership	700
December 8	Curriculum Infusion Lecture MIE 350 Leading in Teams	15
December 10	Presentation to Governing Council	9

Total Number of Student Contacts: 2371

GRADUATE

LEADERS *of* TOMORROW

FACULTY OF APPLIED SCIENCE AND ENGINEERING, UNIVERSITY OF TORONTO

Faculty of Applied Science and Engineering:

Total Student Contacts: 569

Date	Event	No. of Participants
June 4	Innovation Potential Workshop With Professor Brenda McCabe	23
July 15	Media Relations With Liam Mitchell	25
July 22	LOT: G BBQ With LOT G Committee	200
August 7	Workshop on The Art of Coaching With Anandhi Narayanan & Christiana Ens (Celestica)	35
October 10	Leading your Thesis With Professor Mark Kortshot	20
October 23	Leadership 101 With Val Cortes and Ian Simmie	20
October 29	How to get your P. Eng With Manoj Choudhary, PEO	30
November 18	Learning Languages With Professor Doug Reeve	73

Number of Student Contacts: 426

Student Working Group Meetings:

Date	Event	No. of Participants
July 16	Working Group Meeting	9
August 7	Working Group Meeting	16
August 31	Working Group Meeting	10
September 11	Working Group Meeting	8
October 1	Working Group Meeting	15
October 6	Working Group Meeting	11
October 16	Working Group Meeting	3
October 20	Working Group Meeting	5
October 21	Working Group Meeting	20
November 19	Working Group Meeting	6
November 25	Working Group Meeting	10
December 11	Working Group Meeting	6
December 15	Working Group Meeting	8
December 16	Working Group Meeting	16

Number of Student Contacts: 143

LEADERS *of* TOMORROW

CHEMICAL ENGINEERING AND APPLIED CHEMISTRY, UNIVERSITY OF TORONTO

Department of Chemical Engineering and Applied Chemistry

Total Student Contacts: 605

Date	Event	No. of Participants
May 15	Chem Info Session	40
May 22	Leading Transformational Change With Professor David Colcleugh	27
May 29	Workshop on Self-Leadership With Annie Simpson	35
June 5	Who Could You Be in the World With Robin Sacks and Ellie Avishai	24
June 12	Managing Your Career With Nina Reilly	28
June 19	Facilitating Groups With Annie Simpson	35
June 26	Project Work Day	27
July 3	Group Excursion to Lake Ridge, LEFE – High Ropes Activity	21
July 10	Workshop on Coaching and Mentoring Others With Anandhi Narayanan and Christina Ens	31
July 17	Sanofi Plant Tour	18

Date	Event	No. of Participants
July 24	Workshop on Myers Briggs With Elaine Preston	27
July 31	Eng & Public Policy With Professor Doug Reeve	27
August 7	Community Activity	20
August 14	Project Work Day	27
August 21	Final Team Project Presentations	28
September 30	Alumni Breakfast	29
October 30	First Year Lab Tours	32
November 4	Networking Tutorial	30
November 18	PEY Panel	21

Number of Student Contacts: 527

Student Working Group Meetings:

Date	Event	No. of Participants
August 19	Working Group Meetings	17
September 23	Working Group Meetings	32
October 28	Working Group Meetings	15
November 25	Working Group Meetings	14

Number of Student Contacts: 78



Division of Engineering Science

Total Student Contacts: 436

Date	Event	No. of Participants
May 1	Leadership Retreat for Working Group	20
September 10	First Year Orientation Day	350

Number of Student Contacts: 370

Student Working Group Meetings:

Date	Event	No. of Participants
May 19	Working Group Meetings	10
June 1	Working Group Meetings	10
July 7	Working Group Meetings	10
October 1	Working Group Meetings	12
October 22	Working Group Meetings	12
December 1	Working Group Meetings	12

Number of Student Contacts: 66

LEADERS *of* TOMORROW

ELECTRICAL AND COMPUTER ENGINEERING, UNIVERSITY OF TORONTO

Department of Electrical and Computer Engineering

Total Student Contacts: 269

Date	Event	No. of Participants
September 3	LOT Introductory Lunch	11
September 21	Engineering Entrepreneurship series With speaker Avanindra Utukuri	40
September 30	Engineering Entrepreneurship series With speaker Tony Lacavera	40
October 15	Engineer Entrepreneurship series With speaker Cameron Series	40
November 26	Engineer Entrepreneurship series With speaker Farhad Shafai	40
November 25	Sushi Cook off (United Way Fundraiser)	20
December 2	Networking 101 With speaker: Glen Matedeen	15

Number of Student Contacts: 206

Student Working Group Meetings:

Date	Event	No. of Participants
May 18	Working Group Meetings	9
June 26	Working Group Meetings	8
July 10	Working Group Meetings	8
August 24	Working Group Meetings	7
September 16	Working Group Meetings	8
October 30	Working Group Meetings	9
November 3	Working Group Meeting	6
November 24	Working Group Meetings	8

Number of Student Contacts: 63

LEADERS *of* TOMORROW

MECHANICAL AND INDUSTRIAL ENGINEERING, UNIVERSITY OF TORONTO

Department of Mechanical and Industrial Engineering

Total Student Contacts: 330

Date	Event	No. of Participants
May 8	LOT Introductory Lunch- Welcome	50
June 3	Emotional Intelligence and Leadership With Annie Simpson	30
July 20	Habitat For Humanity Build	12
July 22	Conflict Transformation With Anitta Satkunarajah	30
August 5	Start Now! Career Development Workshop With Sheri Browne- Howe and Flo Zeng	25
August 13	Volunteering at Downsview Park With Evergreen	12
August 20	End of the Year Social Event	15
September 14	LOT Kick off Lunch	40
November 11	Ace the Interview	50
November 13	Globalization Workshop With Professor Murray Metcalfe	15

Number of Student Contacts: 279

Student Group Meetings:

Date	Event	No. of Participants
August 27	Working Group Meeting	16
September 17	Working Group Meeting	20
October 4	Working Group Meeting	5
November 24	Working Group Meetings	10

Number of Student Contacts: 51

LEADERS *of* TOMORROW

MATERIALS SCIENCE AND ENGINEERING, UNIVERSITY OF TORONTO

Department of Material Science and Engineering

Total Student Contacts: 128

Date	Event	No. of Participants
October 2	MSE LOT Launch Event	19
October 10	Website/Mailing List Launch	16
October 30	Group Dynamics Event, Newsletter, Industry day	9
November 3	Industry Newsletter	18
November 16	Group Dynamics and Dodge ball	29

Number of Student Contacts: 91

Student Group Meetings

Date	Event	No. of Participants
August 6	Working Group Meeting	5
September 22	Working Group Meeting	8
October 8	Working Group Meeting	8
October 21	Working Group Meeting	5
November 10	Working Group Meeting	11

Number of Student Contacts: 37



Department of Civil Engineering

Total Student Contacts: 43

Date	Event	No. of Participants
September 24	Civil Engineering Student Working Group Meeting	6
November 12	Resume and Cover letter workshop	20

Number of Student Contacts: 26

Student Working Group Meeting:

Date	Event	No. of Participants
November 11	Working Group Meeting	17

Number of Student Contacts: 17

Grand total of student contacts in all departments: 4366

Grand total of events and meetings: 139

Program offers NEW VIEW OF ENGINEERING LEADERSHIP

By Michael Mastromatteo



Leaders of Tomorrow student leadership development coordinator Annie Simpson leads a discussion group as part of the program's summer component.

A leadership program instituted at the University of Toronto (U of T) is adding new meaning to professional ethics and the development of socially committed engineering practitioners.

The university's Leaders of Tomorrow (LOT) program, established by the department of chemical engineering and applied chemistry in 2002 and now encompassing the entire engineering faculty, is aimed at giving students the knowledge, skills and experience to effect positive change in society as engineers and as citizens.

The program, which weaves leadership training and development opportunities throughout a student's entire undergraduate experience, is the outgrowth of one educator's view of engineering education.

Doug Reeve, PhD, P.Eng., chair of the chemical engineering and applied chemistry department, describes LOT as a key component in "a life-long foundation for transformational leaders and outstanding citizens."

Reeve established the basics of the program within the department seven years ago, and by May 2006 he won approval for LOT to expand to all departments within the faculty of engineering and applied science.

Reeve and chemical engineering professor Greg Evans, PhD, P.Eng., are co-leaders of LOT and are now assisted by staff, faculty representatives and students.

Participation in the program is voluntary, but students entering their first year of engineering undergraduate studies are especially encouraged to become involved.

The LOT program primarily comprises lectures, projects and exercises to help students understand the idea of leadership from a new perspective. Leadership concepts are said to "infuse" the undergraduate curriculum, so that participants don't lose sight of the program's essentials and will be encouraged to show leadership prior to and after graduation.

A basic tenet of the program is that leadership is a skill that can be taught, and that leadership opportunities will enhance not only a practitioner's career prospects but also his or her contributions to society.

The program has three main objectives. First, it provides structured activities to enhance an individual's leadership development. Second, LOT encourages engineering graduates to make greater contributions in their work place, their community and to society. Finally, the program aims to improve the connection between engineering and

public policy, which enables participants to contribute to more technologically sound public policies.

EMOTIONAL INTELLIGENCE

In keeping with the leadership dimension, LOT involves some non-technical learning opportunities. Program topics include such areas as personal, group and societal leadership; personality type indicators; emotional intelligence; conflict resolution; facilitation skills; and even “dress for success” tutorials.

Participants are also encouraged to get involved in organizing debates, presentations and guest lectures, many of which enhance a student’s public speaking skills and poise.

Although there is no academic credit attached to the program, LOT awards a co-curricular certificate upon completion of specific leadership activities. But it’s in the personal development area that most students find LOT especially valuable.

Annie Simpson, LOT’s student leadership development coordinator, describes the program as more than a glorified engineering ethics course. She says LOT enhances and expands on the themes delivered to senior undergraduates through the university’s APS 501 course (leadership and leading for groups and organizations), which includes such topics as self-leadership, setting strategic direction and implementing change in an enterprise.

“I think APS 501 advances the objectives of LOT by offering intentional, meaningful leadership education opportunities,” Simpson told *Engineering Dimensions*. “Through the course, students learn a number of thinking frameworks, practise leadership skills, connect with leaders in community and industry, and engage in significant self-reflection.”

David Colcleugh, former president of the DuPont Company, both in Canada and in Asia-Pacific, is lead instructor for the course, and is also involved as an instructor with LOT’s

summer program, which involves leadership and team-building lectures for students working on or near the university campus for the summer months. Colcleugh recently kicked off the 2009 summer program with a lecture on “transformational change.”

Students involved with LOT reflect a new attitude about doing more with an engineering education in the social or community realm.

BLEND OF SKILL AND EXPERIENCE

Sabrina Tang, a third-year U of T industrial engineering student, says the program presents a good blend of skills and experiences.

“LOT has changed my understanding of leadership from thinking of it as a natural talent to a set of skills,” Tang says. “It gave me the opportunity to immediately put new skills into practice and to discuss leadership experiences with other students. It has also been crucial to my development, in realizing the importance of reflection and self-awareness in everything that I do.”

David Schatcer, a master’s degree student in mechanical and industrial engineering, suggests LOT also helps students discern a career direction. “Instead of simply following the career path that appears most profitable or easily attainable, I now seek a career that will allow me to make a positive impact on society,” Schatcer says. “In this harsh economic climate, it’s often difficult to find gainful employment, which also aligns with our ideals. This is especially pertinent in engineering, a profession with the power to do so much harm and so much good.”

For third-year chemical engineering student Sami Khan, LOT has been instrumental in fostering presentation, public speaking and other so-called soft skills. “Through workshops on conflict resolution, group facilitation, self-leadership and others included in the certificate program, I have improved my performance as a team player,” Khan

told *Engineering Dimensions*. “Moreover, I have learned skills on cross-cultural communication and inclusivity, thus making me flexible to work with people from diverse backgrounds. These skills, developed by LOT, form part of the transformational change in an engineering student towards becoming a professional in future.”

Program leaders are gratified with the growth of the program. During the fall 2008 semester, LOT offered 72 events and training opportunities for nearly 4000 student contacts throughout the faculty, representing a sizable increase over the previous year, which saw 58 events and 1556 student contacts.

Not only are more engineering undergraduates tuning in to the leadership program, but some participants intend to take leadership to the next level.

Paul Kishimoto, an engineering science graduate now enrolled in a master’s degree program, is working with a student editorial board to produce an online engineering leadership journal (lot.utoronto.ca/wiki/Publication).

As well, LOT participant Judith Lau has joined forces with other students in developing Citizen Engineer (citizenengineer.skule.ca), an informal organization dedicated to emphasizing the engineering-public policy link.

Although Citizen Engineer has a different emphasis than LOT, Lau sees a strong connection between LOT and an engineering graduate’s public policy interest.

“The activities LOT holds are well advertised, by both print material and through faculty members,” Lau says. “So the students are naturally thinking more about the community and about leadership, simply due to exposure. I suppose that exposure can lead to curiosity, exploration and knowledge, which is why students are becoming aware of needing to do more community-minded and leadership activities.”