

PURSUING GLOBAL EXCELLENCE: SEIZING OPPORTUNITIES FOR CANADA
UNIVERSITY OF WATERLOO (UW)
SIXTH DECADE PLAN (2007-2017)

‘Bold & daring’ is embedded in UW’s DNA. Conceived by founders who dreamed an improbable dream, from its beginning UW has steered a course that has set it apart. With a directed focus that nurtured specializations, in its short history of less than 50 years UW has already achieved enviable national and international recognition.

The circumstance precipitating UW’s establishment in 1957 was the space race and the critical unmet need for engineers. Half a century later a very different circumstance, global competition, is informing how UW needs to direct its energies. To compete successfully in the global arena, excellence is a *sine qua non*. And our Sixth Decade will be the decade where a new kind of boldness and daring will ensure UW achieves the excellence required to make it a premier global competitor.

The University Plan is operational, not prescriptive, and is balanced by plans at the Faculty and academic support unit levels. The Sixth Decade Plan captures general principles which allow UW not only to advance its mission but to be flexible and able to respond as opportunities and challenges arise. UW is already moving ahead toward some of the goals articulated.

The Framework (*ref:* pps 2, 3), approved by UW’s Senate and Board of Governors in 2004, provides the structure for cultivating, nurturing and promoting excellence in all reaches of the enterprise by achieving an even greater degree of academic distinction, becoming more academically and socially relevant, and having its initiatives supported by the necessary resources. In approving the Framework, the University’s two governing bodies gave direction, clearly and unequivocally: pursue global excellence.

September 18/06

Amit Chakma
Vice-President, Academic & Provost

Note

*The Plan was approved by Senate, September 18/06,
and by the Board of Governors, October 30/06*

FRAMEWORK FOR UW's SIXTH DECADE

Overall Priority: Academic Excellence

Academic excellence is the cornerstone of Waterloo's mission. It is achieved by the commitment of the University community to the highest quality teaching, research, scholarship and services which support the academic enterprise. That commitment underlies admission and examination standards, hiring and promotion decisions, criteria for performance evaluation, and academic goals.

Teaching and research are mutually supportive activities, fulfilling equally important and complementary roles in the University. This complementarity is fostered and augmented through a diversity of scholarship and teaching styles. To continue to provide a high quality environment, UW aspires to achieve excellence in both teaching and research, and to make mutually beneficial connections between them.

The University of Waterloo will continue to strive to achieve academic excellence in all its activities through:

- Pursuit of new knowledge and scholarship through the vigorous promotion and encouragement of frontier and reflective research
- Recruitment of the best faculty through national and international searches; application of the highest standards in faculty recruitment, annual performance reviews, and tenure and promotion decisions; retention of top-performing faculty through tangible recognition of excellence in teaching, research / scholarship, and service
- Recruitment and retention of the highest quality academic support staff; acknowledgement of their contributions *via* a merit-based reward system; encouragement of staff, where appropriate, to become active participants in teaching and research initiatives
- Recruitment of students of the highest calibre, from Canada and abroad; provision of a stimulating, varied and challenging environment conducive to the successful completion of their programs
- External peer review of all academic programs
- Global leadership in co-operative education
- Planning measures (academic and administrative) in support of UW's goals and objectives; academic and budgetary decisions to support academic excellence
- Reserving resources to facilitate improvements and respond to opportunities, even in times of financial stringency

Relevance and Connectedness

The University of Waterloo will continue to strive to maximize its academic and societal relevance by:

- Recognizing that experiential learning through its co-op programs contributes to providing students with the best overall academic experience
 - Working with partners in the public and private sectors to promote co-op education and knowledge transfer
 - Enhancing institutional capacity to work collaboratively with all UW constituencies, including public and private sectors, and alumni
 - Introducing new academic programs in response to long-term societal needs
 - Providing service to society through cultural enrichment and knowledge transfer
 - Encouraging and supporting innovation and accepting the collateral risk(s)
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Resources

The University of Waterloo will continue to strive to improve its resources through vigorous fund-raising efforts, and to improve its financial stability through diversification of its sources of income and the continued building of its endowments.

Note: the Framework was accepted by SLRP (November 18/03); and approved by UW Senate (January 19/04) and the Board of Governors (February 3/04).

INFORMING THE UNIVERSITY PLAN

The plan which follows will be executed in the context of four overarching conditions.

Guiding Principles

The following foci will continue to distinguish UW:

- experiential learning and co-operative education
- global engagement and excellence
- excellence, pursued and supported in all activities
- a willingness to make choices, and to act where it can have greatest impact
- leadership in creativity, innovation and risk taking, which support its global excellence goals
- a dynamic, integrated living and learning environment that develops and enhances students' personal and professional competencies

Objectives

Following from the Framework document, by 2017 UW will continue to be internationally recognized for its academic programs, scholarship and societal contributions through the realization of the following overall objectives:

- global leadership in additional, selected areas of UW's scholarly (teaching and research) endeavours, while maintaining national leadership in chosen aspects of academic activities
- enhancing the quality of student experience and learning through deeper integration of experiential learning and research engagement
- preparing students to be global citizens by inculcating broad diversified awareness and creating learning opportunities for them in international settings
- providing effective support services to enhance the quality of student life and the formation of strong alumni/ae links with UW
- increased research and scholarly contribution to society through research intensity and breadth
- commitment to provide excellent academic support staff so that UW can continue to provide high-quality programs, research and services

Benchmarking

There will be ongoing assessment and benchmarking of UW's progress in teaching and research against the performance of peer institutions, globally.

By 2017:

- at least 12 UW academic programs will be the best in North America
- at least 12 of the 44 academic departments/schools will rank in the top 12 in North America
- at least 20 departments/schools will rank in the top three in Canada
- each department/school will participate in a doctoral program
- all departments/schools will rank in the top 25% in Canada

Benchmarking methodologies will be broad-based, vary from discipline to discipline, and include a wide range of qualitative and quantitative measures developed by academic support staff, academic units and Faculties.

Size

UW will continue to manage its undergraduate enrolment selectively, and will grow aggressively in its graduate enrolment. Enrolment changes will be strategic, selective and focused so that achieving academic excellence can be realized. By 2017, UW's Waterloo-Kitchener-Cambridge campuses will have the following student body:

	<u>2017</u>	<u>2005</u>
• Total full-time students	32,000	24,000
• Undergraduate students	24,000	22,000
• Graduate students	8,000*	2,600

*(5,000 research and 3,000 course-based, professional and other non-thesis based Master's students)

To accommodate this growth while maintaining quality, UW will have to increase the size of its faculty and staff and build additional physical and social infrastructure, particularly research and graduate student space.

THE UNIVERSITY PLAN

Realization of what is set out in these plans is expected by 2017 unless stated otherwise. UW is already moving ahead in some of the areas and goals articulated.

Focus will be on what UW does well while retaining flexibility to respond to new initiatives and challenges, and to opportunities presented by evolutionary changes in academic disciplines.

The use of information technology in society generally, and at UW in particular, is pervasive. As such, it will be an important enabling agent in achieving many of the aspirations described under the various headings that follow. UW will continue to make effective use of information technology in support of its mission.

1. Academic Programs

To achieve UW's academic excellence goals, each academic program is expected to:

- attract excellent students
- offer strong scholarly plans and programs
- have faculty members committed to and demonstrating excellence in teaching
- reflect UW distinctiveness, including experiential learning, and be technologically current (in application or through critical perspective), creative and innovative in its curriculum content and delivery, entrepreneurial and interdisciplinary in perspective
- for existing academic programs, be assessed by peers to be *at least* in the top third of similar programs offered in Canada, or be unique and essential to the province; for new academic programs, be viewed as having the potential to be one of the best in Canada and *at least* among the top quarter of similar programs in North America

To highlight the importance of achieving and sustaining high standards related to academic integrity, UW will develop and implement a package of initiatives to educate and sensitize students, faculty and staff about academic integrity issues and appropriate behaviour.

2. Teaching and Research

As a teaching and research intensive university, UW believes in the integration of “knowing” and “learning”. The “knowing” component requires scholarship and research, while UW's “learning” component involves a combination of classroom teaching and experiential learning.

UW aspires to be a leader in enhancing the quality of student learning by greater integration of experiential learning and research engagement and will continue to embrace “innovation” in its academic programs and program delivery.

UW will achieve the following goals for the integration of teaching and research:

- all undergraduate students will participate in a “research” or equivalent “inquiry based learning” project
- all undergraduate programs will offer options for an accelerated Master's degree

In achieving its excellence in teaching goals, UW will realize the following benchmarks:

- enhanced teaching skills
- recognized excellence in teaching at every level
- the development of innovative curricula
- the creation of 20 UW Teaching Innovation Fellowships

In achieving its research intensity goals, UW will realize the following benchmarks:

- increase research revenue to 50% of the operating budget from the current level of 30%
- stand in the top five in Canada in per capita research intensity
- be in the top three in the country re: NSERC grants/FTE faculty
- be in the top ten in the country re: SSHRC grants/FTE faculty
- increase CIHR grants to \$12.5 million

By 2012, UW will achieve the following mid-plan milestones in advancing its research intensity goals:

- increase research revenue to 40% of the operating budget
- be in the top eight in Canada, in per capita research intensity
- be in the top four in the country in terms of NSERC grants/FTE faculty
- be in the top 14 in the country in terms of SSHRC grants/FTE faculty
- double CIHR grants, from current \$2.5 million to \$5 million

A strong and vibrant library is a vital component of an excellent teaching and research intensive university. The UW Library will continue to foster and be a model of collaboration, connectedness and partnerships. The UW Library will rank among the top research libraries in Canada, as evidenced by:

- quality and strength of information resources to support research, learning and teaching
- impact of educational programs
- high faculty, staff and student satisfaction with information resources, services and facilities
- innovative and effective use of technology to support delivery of services and information resources

To create a critical mass of scholars and research support infrastructure, UW will promote the creation of Senate-approved research centres and institutes. By 2017, UW will have the following research support infrastructures in place:

- at least six research centres/institutes supported by institutional funding, recognized by peer evaluation to be among the several best in the world
- at least 20 research centres/institutes supported by institutional funding, recognized by peer evaluation to be among the several best in the country
- a UW Research Fund worth 1% of UW's research revenue to support new large research initiatives with external support
- an internal research fund to support research and scholarly work in the humanities and social sciences
- 20% of FTE faculty members holding chairs (including endowed, industrial and Canada Research Chairs)
- 20 year-long visiting professorships to bring eminent national and international scholars to UW

3. *Undergraduate Students*

To be competitive, UW will achieve the following goals in attracting top undergraduate students from Canada and abroad:

- be in the top three in Canada in attracting first-year students with 90% plus grades
- admit 75% of first-year students who are eligible for scholarship support
- establish a highly selective National Entrance Scholarship program
- increase the international undergraduate student population to 20% of the total
- establish 25 International Entrance Scholarships
- guarantee to meet the financial needs of ALL qualified Canadian students through a combination of scholarships, research internships, student loans and co-op jobs

UW will further an enriched and supportive learning environment by achieving the following goals:

- reducing the student/faculty ratio to 20:1
- providing research opportunities to undergraduate students by expanding the Undergraduate Research Initiative
- expanding on-campus research co-op terms or internships for gifted students, as entrance scholarships

4. Graduate Students

UW will significantly enhance its graduate programs in both quality and in quantity and will achieve the following targets:

- graduate student enrolment will be at least 25% of the total student population
- international students will comprise 30% of the total graduate student population
- graduates of other Canadian universities will comprise at least 30% of the graduate student population
- a guaranteed minimum level of support for all research-based full-time graduate students:
 - Doctoral students, starting in 2007
 - Master's students, no later than 2012
 - at least six online Master's level professional degree programs in specialized areas

5. Experiential Education

UW will re-affirm its position as the leading co-operative education university in the world, and subsequently introduce / enhance experiential learning opportunities for regular students:

- Co-operative Education and Career Services (CECS) will ensure greater student engagement in key decisions about the administration of the co-op program
- UW will enhance the quantity of high-quality co-op job opportunities through partnerships among CECS, the Faculties and senior administration
- UW will have a recognized leadership presence in research in leading edge practices in co-operative education
- CECS will improve processes to evaluate the quality of co-op jobs
- by 2008, UW will be using a mix of measures to facilitate and evaluate students' critical reflection relating work term experience to academic learning
- by 2017, UW will offer a mix of experiential learning opportunities to all regular students

Faculty and staff members will be engaged in and committed to the co-operative education model and its importance to the University of Waterloo, through:

- being a model employer for co-op students (as rated by students), providing high quality work experiences especially for first-year students
- promoting co-op at every opportunity when interacting with government, private sector and NGOs (Non-Government Organizations)

CECS will achieve the following targets:

- largest number of students in largest number of programs
- consistently high employment rates for students
- consistently high ratings of UW co-op students by employers
- consistently high ratings of UW employment process by students and employers
- increased co-op opportunities for community and international service

6. Student Engagement

UW will be a leader among its peer public institutions in North America in engaging its student body intellectually, culturally and socially. To this end, UW will:

- facilitate an integrated living-learning initiative to provide the richest possible educational experience both inside the classrooms and beyond, in all of the following areas:
 - scholarly / intellectual
 - career / professional
 - social / cultural / civic
 - health / wellness
- create learning opportunities beyond the classroom, including special seminars on current topics.
- actively promote participation in volunteer activities and service learning, both locally and internationally
- provide on-campus or near campus housing for 50% of the undergraduate student body
- excel in service to students (e.g., provide “one-stop service” to students where possible)
- recognize that student engagement is a priority at UW and that every employee shares responsibility for developing, enhancing and maintaining it
- enhance staff members’ participation in academic advising
- develop a comprehensive system for student feedback on all services, particularly at the academic department/school level

7. *Student Support Services*

Pursuit of the University’s goals will engage UW academic support staff and faculty advisors, and will include the following metrics:

- a more highly visible Career Services unit:
 - surveys of students (various academic levels, disciplines and modes of study) and faculty will show increased awareness of the services
 - high positive response rates in student satisfaction surveys
 - increased use by students who need the service
 - a high quality career advising service, delivered both in person and online
- the best Year One transition program in North America, including an institutionally supported ‘rescue’ program:
 - high student satisfaction with initial course selection process
 - high recovery/success rate for those identified as in academic jeopardy
 - higher retention of Year One students
- the best student academic advising process in North America through a seamless integration of accurate online advising support and productive one-on-one consultation:
 - high positive response rates in student satisfaction surveys that UW took special interest in helping students fulfill goals
 - stronger alumni support and satisfaction
 - higher graduation rate
 - lower failure rates

8. *Faculty*

To achieve its academic excellence goals, UW will recruit and retain the very best faculty members available, competing with top North American universities by:

- creating a stimulating intellectual environment through the establishment of clusters of academic excellence
- making available state-of-the art research facilities and resources, including information resources
- rewarding innovation that attempts to enhance UW's strengths in teaching
- offering competitive compensation packages
- creating opportunities for faculty to pursue professional and leadership development
- fostering collaboration and integration across academic units.

9. Staff

A world-leading university needs highly competent staff. UW will enhance an environment that promotes the recruitment of staff of the highest quality, encourages and facilitates professional development of staff, and allows staff to use their expertise fully to ensure efficient and effective operation of support services. These objectives will be achieved by adopting the following practices:

- recruiting the best available staff through open competitions
- encouraging professional development for all staff members
- offering competitive compensation packages
- enhancing opportunities for staff to engage in planning and problem resolution with managers at the unit, Faculty and senior levels:
 - develop and improve existing management skills in coaching and mentoring staff
 - provide for continued growth in skills and opportunities for staff through significantly increased training & development programs, including those aimed at accommodating diversity among students
- recognizing non-academic staff involvement in and contribution to the UW educational process:
 - increase role of staff as student advisors, mentors and teachers
 - engage staff in curriculum and other academic development
 - promote a culture of faculty and staff as partners in the academic mission
 - encourage staff to participate in student learning outside the classroom by role modelling, feedback, excellent service and coaching at every contact point

10. UW Graduates

UW will produce well rounded graduates with a strong scholarly foundation by integrating teaching and research. This will be manifested by the following outcomes:

- UW graduates who are awarded national scholarships (e.g., CGS, OGS, NSERC, SSHRC, CIHR) will be the highest per capita in Canada

As a university well known for innovation, UW will have academic programs which ensure that all graduates possess the following distinguishing characteristics:

- creativity, coupled with a willingness to take risks
- commitment to continuous improvement and assessment
- ability to build relationships and to work effectively in teams
- well-honed problem-solving and critical thinking skills

11. Alumni Engagement

Engaged alumni are vital to the success of UW. To this end, the University will involve alumni to achieve the goals of the Sixth Decade Plan and UW's mission, by:

- expanding life-long engagement opportunities in order for alumni to stay connected after graduation; this will include volunteer and mentorship opportunities, engagement with Faculties, students, CECS, recruitment, research, athletics and development, as well as opportunities for social interaction, etc.
 - encouraging alumni to expand their presence nationally and internationally; by 2017, UW will establish ten active international alumni chapters focusing on recruitment, co-op, research, development and alumni relations
 - enhancing online resources, enabling alumni to be good ambassadors for UW, thereby allowing all alumni to make meaningful contributions to the University
 - engaging alumni to enhance corporate networks
 - creating opportunities for alumni to become actively engaged in UW initiatives, such as new student and international recruitment, and new co-op work opportunities
- [see also Community Engagement, next page]

12. Federated & Affiliated Institutions

Recognizing the unique relationship between the University and its Federated University & Affiliated Colleges, UW is committed to:

- maintaining and strengthening this mutually beneficial relationship in its various dimensions
- supporting the ongoing academic development of these institutions within the context of UW's overall goals

13. Community Engagement

UW's community extends well beyond the campuses in Waterloo, Cambridge and Kitchener. Included are the local communities, educational partners (other universities, co-op employers, research collaborators), and alumni and friends throughout the world. Ways in which UW will connect and collaborate with these different communities include:

- § engaging residents, neighbourhood associations and businesses adjacent to the three campuses to achieve constructive relationships
- § interacting with local municipal governments to establish and sustain student-friendly initiatives
- § welcoming community members to public lectures and other events on the campuses, and making such events available to others at a distance using appropriate technology
- § working with co-op partners to make UW co-op processes employer- and student-friendly
- § connecting with alumni and friends using various methods, including electronic bulletins, newsletters, annual reports, and UW-hosted events off campus

14. National and International Presence

To facilitate the establishment of the University's global leadership, UW will expand its presence nationally and internationally and have:

- at least two international campuses with focused activities abroad
- physical presence in select key locations in Canada and abroad
- established partnerships, collaborative academic programs, and joint research centres with other prominent national and international institutions

15. Internationalization

UW will become Canada's most internationalized and, therefore, internationally best-known university, by achieving the following goals:

- increase the international student population to 20% of the undergraduate student total and to 30% of the graduate student total
- enable at least 25% of UW undergraduate students to spend an academic, service or co-op work term abroad
- strongly encourage all UW students to have oral and written command of a second language
- create an "International Village" in student housing with a mix of Canadian and international students
- create 12 international visiting fellowship positions for international scholars
- create 60 international merit- and needs-based undergraduate scholarships

16. Facilities

UW will continue the practice of maintaining its physical environment, including developing plans and directing funds to upgrade and update older space and providing appropriate physical resources for current and future teaching, research, and administrative needs. The teaching support environment will be strengthened through the following actions:

- equipping UW classrooms with technologies that support effective teaching and learning, and continue to promote and support the use of these technologies

- building state-of-the-art research and graduate student space
- creating a “facilities renewal fund” at 1% of the operating budget
- seeking, more aggressively, funding from various sources (government, private sector)
- establishing a “scholars’ village” to house senior undergraduate students, graduate students, post doctoral fellows, research associates, visiting scholars etc., with academic, social and recreational facilities on the North Campus

17. Administrative Excellence

In parallel with its academic excellence goals, UW will foster and encourage a culture of administrative excellence and strong sense of service to the institution by continuing to adopt and develop the following measures:

- establish a “culture” of periodic reviews for all academic support activities
- conduct regular surveys of client satisfaction for all academic support units
- continue ongoing initiatives to enhance administrative efficiency
- encourage all staff members to identify areas where efficiency and effectiveness gains could be made
- encourage and formalize leadership training programs for academic department Chairs / school Directors, Associate Deans and Academic Support Department Heads

18. Resource Diversification

UW will have incremental resources to support its pursuit of academic excellence, including:

- cumulative funds raised by Campaign Waterloo, by the end of the Sixth Decade, to exceed a billion dollars
- annual funds raised to reach 20% of the operating budget for purposes such as:
 - 100 endowed chairs
 - 120 professorships

19. Strategic Resource Allocation

Starting in 2007, UW will implement the following strategic resource allocation measures to support its academic excellence goals:

- 2% of the budget will be reallocated on an ongoing basis.
- a pool of FTE faculty positions will be allocated selectively to programs/areas achieving their academic excellence goals:
 - 2007 -- 10
 - 2012 -- 15
 - by 2017, this will rise to 2% of the FTE positions (*est.* 20)

TIME FRAME

Although decade-long planning allows a focus on long term goals, circumstances may require the plan to be adjusted. While the Plan will be monitored and progress reported on annually, a mid-term review in 2012 would be useful as would the establishment, where possible, of mid-term goals.