

Lakehead University Academic Plan

Chapter 1: Setting the Stage

March 6, 2012

An academic plan¹ looks to the future and builds on the past. Lakehead University has a strong past on which to build, and this Academic Plan envisions a bright future for Lakehead as a comprehensive, research intensive university, recognized nationally and internationally for excellence in teaching and learning. The Academic Plan is designed to guide Lakehead University's decision-making and priorities over the next five years with this long-term vision in mind. This plan encourages the University to be ambitious and innovative while working within the fiscal constraints that will be faced.

The following key principles inform and guide this plan's priorities and strategies as it looks to that future:

- Lakehead University is fully committed to providing innovative, high-quality programs that attract students, faculty, and staff from Ontario, Canada and the world, recognizing that these individuals enrich our communities.
- Lakehead University embraces its role of serving the regional populations associated with its campuses in Thunder Bay and Orillia, offering programming that enables students living in these regions to achieve their educational goals on and off campus, and empowers them to make a positive difference in their communities.
- Lakehead University recognizes the distinctiveness of our two campuses and its responsibility to serve different stakeholders in these regions. We are committed to addressing both the challenges and opportunities that arise from distinctiveness in ways that will allow both Thunder Bay and Orillia to thrive and fulfill our University's vision and mission.
- Teaching and research are inextricably linked and Lakehead University is committed to excellence in both. Lakehead University believes that its professors at both campuses should engage in both teaching and research.
- Research and other scholarly activities are defining characteristics of a University and Lakehead University recognizes the importance of basic and applied research, and scholarly and creative activities.

¹ **Implementation of the 2006 – 2010 Academic Plan**

In 2010, reports were prepared to summarize the implementation status of the 2006 Academic Plan as it relates to both undergraduate and graduate programming. The reports are organized by the action items referenced in the plan, and provide chronologies of how the Academic Plan was implemented. The report was presented for discussion and feedback to the Senate Academic Committee and was subsequently posted (June 2010) on the Vice-President (Academic) & Provost's website <http://vpacademic.lakeheadu.ca/?display=page&pageid=73>. Summaries of the outcomes are presented in Appendix 1 (Undergraduate Programs) and Appendix 2 (Graduate Programs)

- Strong graduate programs are fundamental to advanced research and in many disciplines graduate students are essential components of the support structure for teaching and research activities.
- As it continues to develop as a comprehensive university with nationally recognized professional programs, Lakehead University is committed to maintaining its core strengths in arts and science.
- Lakehead University is committed to social justice, which, in keeping with our strategic mission, begins with recognition of Aboriginal realities.
- Lakehead University is committed to educating students who are well prepared to make significant contributions to the economy, and to contribute to issues of social justice and environmental sustainability, locally, nationally, and globally.
- Lakehead University is committed to enhancing educational opportunities for First Nations, Métis and Inuit (Aboriginal) populations.
- By engaging in service to the institution, profession, and other communities, the teaching, research, and learning experiences at Lakehead University are enriched.

Process is, of course, vital to the success of any academic planning activity, and the Committee affirms the following principles:

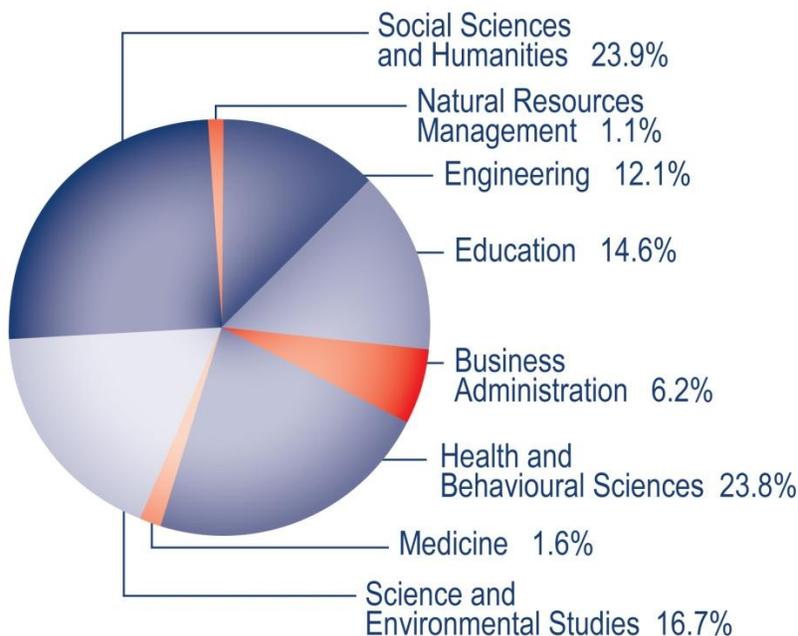
- Academic planning is an integrated process that occurs at the levels of Senate, Departments/Schools and Faculties.
- Lakehead University is committed to collegial governance in all aspects of its planning and operation.
- Academic planning should be fiscally responsible and supported by appropriate administrative processes.
- The Academic Plan affirms the commitment to the Academic Charter as stated in the 2005-2010 Strategic Plan.
 - *All students should have equal opportunity to study in learning environments that are funded sufficiently to meet prevailing disciplinary standards;*
 - *All full-time faculty should have workloads and resources that provide them with equal opportunity to meet their teaching, research, and administrative obligations;*
 - *All Senate approved programs, as well as the Library and Part-Time Studies, should have funding sufficient for them to meet disciplinary standards, and where applicable, accreditation requirements.*

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Lakehead University Today

Established in 1965, Lakehead University offers a diverse range of undergraduate and graduate programs with nine faculties: Social Sciences and Humanities, Science and Environmental Studies, Business Administration, Education, Engineering, Natural Resources Management, Health and Behavioural Sciences, and Graduate Studies. The new Faculty of Law will welcome the charter class on the Thunder Bay Campus in the fall of 2013. Lakehead 's Thunder Bay campus is home to the west campus of the Northern Ontario School of Medicine (NOSM) – a joint initiative of Lakehead and Laurentian Universities – which graduated its first cohort of 55 doctors in May 2009. The Orillia campus offers an interdisciplinary undergraduate program in arts and sciences that may be taken concurrently with education, as well as programs in business, social work, and consecutive education.

2010-2011 Full-Time Undergraduate Enrolment by Faculty (Headcount) ²



² Data is from Institutional Analysis and Government Relations

2010-2011 Enrolment (Headcount) and Degrees, Diplomas and Certificates Awarded, Employees, Faculty, and Alumni ³

2010/2011 Enrolment as of November 1 reporting date		Degrees, Diplomas, & Certificates Awarded (2010 calendar year)	
Thunder Bay Campus	7,729	Certificates	33
Full-time Undergraduate	5,652	Diplomas	87
Part-time Undergraduate	1,477	Bachelors	2,610
Full-time Graduate	577	Masters	230
Part-time Graduate	23	Doctorates	8
		Total	2,968
Orillia Campus	976		
Orillia Full-time Undergraduate	877		
Orillia Part-time Undergraduate	95		
Orillia Graduate	4		
Total number of Aboriginal Students (Self declared)	815		
International Undergraduate	87		
International Graduate	53		
Total Enrolment	8,705		

2010-2011 Employees, Faculty, and Alumni

Full-Time Employees	715
Part-Time Employees	1,135
Full-Time Faculty	314
Alumni	48,398

Teaching and Learning

Lakehead University prides itself on its teaching excellence and the delivery of a quality learning experience, and there are many endeavours that we should indeed be proud of. In terms of facilities, a large variety of classroom and theatres are equipped as “smart classrooms”, and a newly renovated Learning Commons located within the Chancellor Paterson Library, Heritage Place, and the Orillia Academic Building provide students with a state-of-the-art environment in

³ Data is from Institutional Analysis and Government Relations (as per the Annual Report to the Community, Interdisciplinary Studies/HBASC enrolment is split equally between Social Sciences and Humanities and Science and Environmental Studies)

which to study and work. Student-teacher ratios are favourable, average class sizes are small, and the percentage of full-time faculty with doctoral degrees is high⁴. Student evaluations of teaching performance consistently indicate that our instructors are highly regarded by their students. External reviews of our undergraduate and graduate programs are generally strong. Some of our faculty are actively involved in scholarship related to teaching and learning, and many instructors have been recognized with nominations for *Contributions to Teaching* and *Distinguished Instructor Awards*.

The University's commitment to excellence in teaching was made evident in the 1999 Strategic Plan, which recommended the establishment of an Instructional Development Centre to provide support for faculty and graduate students engaged in teaching at the University. This recommendation was supported by past academic plans, and the Centre was established in 2005. Since its inception, the Centre has coordinated and offered workshops, developed a website with online resources, provided one-on-one consultation, mounted an annual symposium on teaching and learning, offered support for curriculum revision to academic units, and has supported the Senate Teaching and Learning Committee in its mandate to advise Senate on ways to enhance teaching and learning.

Lakehead University also has a long history of providing learning opportunities through its Office of Continuing Education and Distributed Learning (CEDL), and the number of students who have been able to take advantage of the courses offered online continues to grow. CEDL offers a wide range of options including online courses, videoconferencing, web streaming, print-based courses, and some classes available at off-campus sites. At the program level, there are certificates and degrees available entirely at a distance with courses offered according to a distinct schedule and sequence of courses leading to defined learner outcomes.

From CEDL's initial days of three courses being offered through a print-based format, course and program offerings plus delivery options have grown significantly. From 1745 full course equivalents (FCEs) in 41.5 courses in 2001-02, last year's FCE registrations totalled more than 7070 in approximately 200 courses. Programming options have included seven certificates, two undergraduate degrees and three graduate degrees delivered through distributed learning. It is important to note, however, that the demand by instructors for support for courses taught using distance and/or distributed modes of delivery now outweighs available resources.

An important development this year in terms of Lakehead's commitment to being a learner-centred university was the opening of the Learning Commons in the Chancellor Paterson Library (Thunder Bay), in Heritage Place (Orillia), and in the new Academic Building (Orillia). The Learning Commons provide attractive spaces for students to gather over coffee, form study groups both formally and informally, use wireless internet, and access the many resources available to them at the library. It is a significant step for Lakehead University to offer this kind of environment and students have made significant use these facilities since they opened. In addition to the library resources that have always been available to students, the Patterson Library Commons houses two additional resources to support student learning: the Lakehead University Math Assistance Centre (LUMAC) and the Writing Centre. LUMAC was established in 2009, and was initially located in the Braun Building. It moved into the main floor of the Chancellor Paterson Library in 2010 and is now part of the Learning Commons. It offers workshops on topics such as statistical analysis and quadratic equations, and in the winter of 2010 alone it offered 273 hours of tutoring to 57 students with a total of 226 student-visits. The

⁴ 2010/2011 Institutional data is available at <http://bolt.lakeheadu.ca/~analysis/>

Centre is coordinated by a faculty member and staffed by senior level math students. The Centre is currently working on the development of some online tutoring services.

The Writing Centre was established in Thunder Bay in 2011 as a result of work initiated by the Senate Academic Committee, and it is also located in the Learning Commons. The Thunder Bay campus Centre offers one-on-one tutoring, provided by the Centre Coordinator and trained graduate students. During the first term of operation (winter 2011), the centre serviced 67 students for a total of 121 student-visits that took place during 87 hours of tutoring. During the fall of 2011, the centre serviced 91 students for a total of 209 student-visits. The Centre works closely with both the Instructional Development Centre and the Student Accessibility Services. In 2012, the Centre will encourage new writing across the curriculum (WAC) initiatives, including developing a writing pedagogy course and a series of WAC workshops. An existing on-line Writing Centre is also under revision. On the Orillia campus, the Writing Centre is operated via the Ontario Student Work Study program, with a student coordinator, student tutors, and the support of a faculty representative. Resources have been compiled and one-on-one training sessions for peer editors are delivered each fall. Resources have been compiled and one-on-one training sessions for peer editors are delivered each fall. Over the course of the 2010 academic year, the centre serviced a total of 224 student-visits. The Orillia campus Writing Centre will continue to offer student services as part of a work study program.

While Lakehead University has reason to be proud of its achievements in teaching excellence, there are some indications that there is still room for improvement. Results from national surveys including the National Survey of Student Engagement (NSSE), Canadian University Survey Consortium (CUSC), Canadian Graduate and Professional Student Survey (CGPSS), and the Consortium for Student Retention Data Exchange (CSRDE) provide mixed results. While such surveys are not always a reliable indicator of students' actual experience, we would be unwise to ignore them as at least one indicator of satisfaction, as well as an indicator of the extent to which we are fulfilling our own mandate to engage students in active learning.

Certainly, some of the results from these surveys are positive. Eighty-nine percent of our students graduating with undergraduate degrees are satisfied or very satisfied with the overall quality of education received (CUSC, 2009). Ninety percent agree or strongly agree that their academic learning experiences at Lakehead University have been intellectually stimulating (CUSC, 2009). Ninety percent of the graduating undergraduate students agree or strongly agree that they are satisfied with the quality of teaching; although this is slightly lower than those recorded for our peer⁵ universities. On other teaching quality indicators including organization, communication, degree of intellectual stimulation, and quality of feedback, Lakehead scored lower than our peer institutions (CUSC, 2009). Eighty-six percent of our Master's level thesis route students responded that the quality of academic experience at Lakehead University was excellent, very good or good (not significantly different from the provincial average. Twenty-one percent of first-year and 25% percent of senior-year students felt improving the quality of course instruction by professors was one of the two areas that the University most needs to address to improve the student academic/experience in the classroom (NSSE 2008 – Ontario Consortium Questions). Since 2006, Lakehead University's Year 1 to Year 2 retention rates have been

⁵ CUSC Peer Universities – Group one universities: University of British Columbia (Okanagan), University of the Fraser Valley, King's University College, Lakehead University, University of Lethbridge, Mount Allison University, University of New Brunswick (Saint John), University of Northern British Columbia, Nipissing University, Nova Scotia Agricultural College, University of Ontario Institute of Technology, Redeemer University College, St. Thomas University, St. Francis Xavier University, Saint Mary's University, Trent University, and University of Winnipeg.

higher than at peer⁶ institutions but lower than the average of all Ontario Universities. Since 2006, Lakehead's six year graduation rate has, on average, been lower than the Ontario average, although similar to peers⁷ (CSRDE, 2007-2009).

The preliminary results from the Ontario University Graduate (Employment) Survey 2008 released in July 2011 reveal that once again the employment rate for graduates of undergraduate degree programs at Lakehead University two years after graduation is higher than the average employment rate for graduates of undergraduate degree programs in the Ontario University System. Two years after graduation in 2008, the employment rate for graduates of undergraduate degree programs at Lakehead University was 94.5%, compared to 93.8% for the Ontario University System. Six months after graduation in 2008, the employment rate for graduates of undergraduate degree programs at Lakehead University was 94.3%, compared to 91.7% for the Ontario University System.

Lakehead University is equally committed to excellence in teaching and research, and the data provided from surveys like those mentioned above provide a useful but limited measure of excellence in teaching. There are no metrics available for measuring teaching excellence that are parallel to those currently used by the University to measure research excellence, such as the InfoSource ranking and measurement of publications. Nonetheless, we should carefully consider the information we have and encourage the development of other metrics to measure and encourage excellence in teaching and learning. We know, for example, that a number of faculty members are already engaged in the Scholarship of Teaching and Learning (SoTL), that is, engaging in research and scholarship on their own teaching practices and innovations to assess their efficacy. Such scholarship ranges from requesting informal feedback from students to fully developed research projects submitted for Research Ethics Board approval. This kind of work allows faculty to monitor the effectiveness of their teaching strategies in concrete ways that can strengthen current practices and develop new and innovative ones.

Research

Lakehead University's research activities are a testament to its growing commitment to become one of the top 25 research-intensive universities in Canada. Currently, Lakehead has nine Canada Research Chairs, nine research centres/institutes dedicated to specific research intensive areas, 31 graduate programs, and has seen a doubling of external research funding within the last few years. However, it is the research endeavours themselves that create the framework that will support our vision of becoming a global research leader: the people, the resources, and the partnerships that constitute research productivity at Lakehead University.

There are many types of, and approaches to, academic research and thus many ways of measuring productivity. Lakehead values both "basic" or curiosity-driven research where the impacts may take some time to be realized, and applied research whose relevance is more

⁶ NSSE – Universities included in the Canada Peers comparison group include: Brock University, Laurentian University, Memorial University of Newfoundland – St John's Campus, Saint Mary's University, Thompson Rivers University, Trent University, Université du Québec en Abitibi-Témiscamingue, University of British Columbia – Okanagan, University of Ontario Institute of Technology, University of Prince Edward Island, and Wilfrid Laurier University.

⁷ CSRDE Peer – Peer Universities are a group of Ontario universities that are similar to Lakehead University in size and program offerings. For this analysis Peer Universities include: Brock University, Laurentian University, Nipissing University, Ontario College of Art and Design, Trent University, University of Ontario Institute of Technology (starting 2007), University of Windsor and Wilfrid Laurier University.

immediately obvious and its impact more easily measured. Importantly, these basic and applied programs often intersect to create emerging opportunities that are multidisciplinary, interdisciplinary, and/or interprofessional in nature.

Research Funding

Lakehead received on average \$7.9 million of research funding annually during the years 1999 - 2004. From 2004 to 2010, the average annual research funding received by Lakehead increased to \$17.1 million. Research Infosource Inc. uses as one of its rankings faculty member research intensity, which is defined as total research income per full-time faculty position. In 2002, Lakehead ranked 37th among Canadian universities in this category. In 2009, our ranking had increased to 31. The last two years have also witnessed the awarding of Lakehead University's first Social Sciences and Humanities Research Council (SSHRC) Community University Research Alliances (CURA) and Major Collaborative Research Initiatives (MCRI) grants, as well as a CIHR Aboriginal Health Intervention Grant. This funding has supported a total of 42 projects worth \$7,383,980 (not including matching funds from the Province of Ontario).

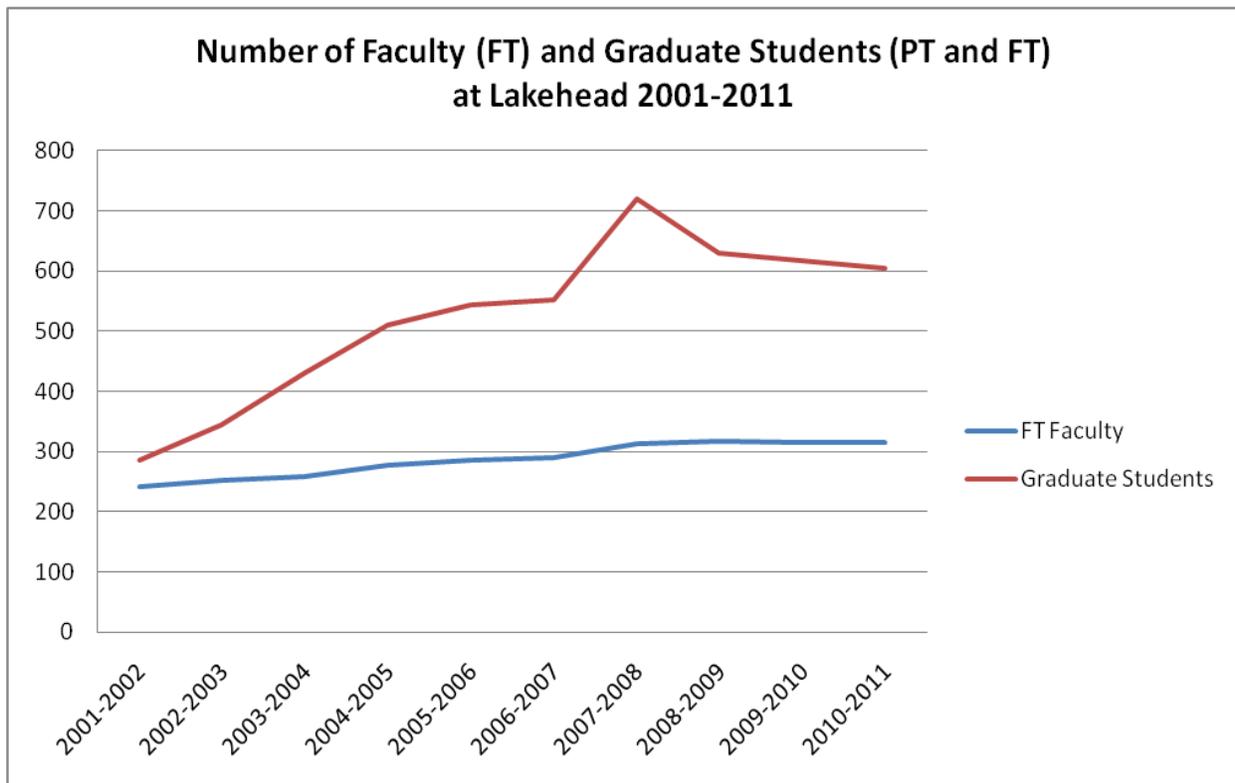
Total Lakehead Research Income 1999-2010 (in thousands)



Research Capacity

Lakehead University has made great strides in increasing its research capacity in the last decade. From 2001 to 2011 the number of full-time (FT) faculty members at Lakehead University increased from 242 to 314. During the same time period, the number of graduate students (both full and part-time) increased from 286 to 604. Another indicator of growth in research capacity is the number of postdoctoral fellows and visiting scholars at the University as

this is an indicator of advanced training and collaboration. In 2007, the first year that the Office of Research was tasked with monitoring the number of post-doctoral fellows and visiting scholars at Lakehead, there were a total of 10 visiting scholars and 15 postdoctoral fellows. By 2011, the total number of visiting scholars had increased to 20, while the number of postdoctoral fellows was 36. In addition, since 2007, eight new graduate programs have been developed bringing the total number of graduate programs at Lakehead to 31.



The number of research chairs at the University has also increased. In 2001, Lakehead University was home to three Canada Research Chairs. By 2011, the number of research chairs had increased to nine. Following the support (\$6 million) of the Government of Ontario in 2007, Lakehead University launched a major research initiative: the Biorefining Research Initiative (LUBRI). A Senior Ontario Research Chair with expertise in industrial biotechnology and biorefining was hired as LUBRI's Founding Director and two endowed Ontario Research Chairs in Biorefining were recruited. Since 2008, Lakehead University has awarded a total of six Lakehead University Research Chairs (two-year terms) in various disciplines. The University has also witnessed a major infusion of infrastructure funding from the Canada Foundation for Innovation.

Research Productivity

One of the fundamental purposes of a university is the dissemination of knowledge, through teaching, publication, and sharing of scholarly and creative activities. Research output at Lakehead University includes books with academic and popular presses, peer reviewed journal articles, professional articles, reports, manuals, conference presentations, music compositions

and performances, dance, drama, films, novels, the production and showing of visual art in galleries and installations, patents, policies, and other evidence of collaboration and consultation with government and non-government organizations, Aboriginal communities, and other partners. As a result of our knowledge transfer and mobilization efforts, Lakehead researchers have participated in industry research contracts, invention disclosures, intellectual property protection other than patents, licenses, and start-up companies, and have had an impact on social policy, public thought, culture, medical advances, scientific advances, industrial productivity, and economic development.

Lakehead's research productivity has increased over the years as demonstrated by the Research Infosource Publication Intensity Measure known as "Publication Intensity", which is defined as the total number of publications per full-time faculty (full, associate and assistant faculty positions only were included). It has been estimated that there is, on average, a minimum 2-year lag time between research and publication. In 2002, Lakehead University ranked 38th among Canadian universities under the Publication Intensity measure, and by 2009 Lakehead's standing had improved to the 31st rank.

This past year, Lakehead was ranked among the Top 3 Research Performers in the Undergraduate Category by RESEARCH Infosource, in the category Research Intensity Growth and Research Publication Growth over the past decade. Based on external research grants received by the three national councils (NSERC, SSHRC and CIHR) the Macleans magazine in its 2010 publication ranked Lakehead 4th overall in the undergraduate university category. This is a testament to the contributions of Lakehead University's faculty, students and staff to productivity and concomitant transfer and mobilization of knowledge.

Innovation Management

Knowledge transfer has been occurring at universities in a variety of ways since the institutions were first created over nine centuries ago and increased dramatically with the advent of publicly funded universities in North America in the 19th and 20th centuries. Lakehead University is a dynamic part of this publicly funded university tradition and, as part of its mandate it is committed to promoting knowledge transfer in order to meet the needs of the people of Northwestern Ontario, Simcoe County, and beyond. Traditional methods to transfer knowledge have included teaching, mentoring students, publishing papers, writing books and technical reports, and conducting various forms of community extension services, such as community classes and workshops. Knowledge can also be transferred to others by partnering with industry and other research partners and through the commercialization of certain research outcomes. However the commitments we have as a publicly funded institution to the people of Ontario and Canada should remain pre-eminent.

As the University continues to expand with increased numbers of faculty members and students, the amount of knowledge transfer activity will grow proportionately. Some forms of knowledge transfer that have recently gained prominence, such as partnering with industry and commercialization of research outcomes, are not widely understood, both within and outside university campuses, and must be examined carefully to ensure their appropriateness within the framework of a publicly funded institution. Limited funding also restricts knowledge transfer. Inappropriate handling and funding of knowledge transfer can be a threat to academic freedom or restrict the transfer of knowledge from researchers to the world.

Community Engagement: Service within the University and Beyond

One of the great strengths of Lakehead University is the research, education, and professional service profile we have developed in our local, regional, provincial, and national communities. Faculty and staff members have engaged in every aspect of community life, both within the University and beyond. Faculty members contribute to the day-to-day operations of the University through their commitment to program, Department, Faculty, and University-level committees, as well as to promotion and recruitment activities such as Program Day, Grade 11 Day, and the Regional Employment Fair. Beyond the university, faculty and staff members regularly engage with professional learned societies, community and nongovernmental organizations, federal provincial and municipal governments, other educational organizations (e.g., schools, colleges, and other universities), as well as other members of our local communities. The expertise and social capital invested in our communities are important to both the fabric of the regions in which we are situated as well as the vitality of our University. Our contributions are diverse and contribute to the general well being of the population in Northern Ontario and Simcoe County.

One feature that has the potential to distinguish Lakehead's research activity is the community-based research that takes place in Northern Ontario and Simcoe County. Such research often includes community members as research participants who participate in defining research questions, methodologies, modes of dissemination, and practical applications of research results. This approach to research is closely aligned with Lakehead's commitment to, and support of, community service learning, in which students are taught to develop and participate in collaborative community-based research projects.

Alumni have always played a special role in the development of the University and continue to do so with vigour. Alumni are part of our Board of Governors, our senior administration, faculty and support staff. Alumni and the Alumni Association serve a special role in keeping Lakehead University grounded on educational and societal issues. The extensive links we have fostered in the community have assisted us in preparing our students, enhancing their understanding of life beyond the walls of the institution, prompting them to pursue employment opportunities, and to be aware of and act on their social responsibilities. Our goal is to maintain our existing linkages, partnerships and programs, while at the same time seeking to broaden our reach around the globe.

Challenges That We Face

As part of the planning process the Academic Planning Committee completed an environmental scan looking at Lakehead's strengths and weaknesses, as well as external opportunities and threats. It is clear that over the next five years, Lakehead will be facing significant challenges. The strategies chosen to respond to these challenges, and the success or failure of its strategies, will largely determine the future for five to ten years.

As a Regional University ... And More

How can Lakehead University enhance the social, ecological, and economic vitality of the regions we serve? How can we strengthen our impact and competitiveness beyond the regions we currently serve?

Lakehead's responsiveness to the needs of Northern Ontario has been key to its significant growth and development in the past. The Faculty of Natural Resources Management (formerly the Faculty of Forestry), Department of Indigenous Learning, Northern Ontario School of Medicine, and the new Faculty of Law are examples of faculties and programs that were conceived based on the needs of the people of this region. Likewise, Lakehead's responsiveness to the needs of Simcoe County has led to the development and growth of the Orillia Campus. The offerings of undergraduate degrees, as well as a Masters in Business Administration, have given the people of this region the opportunity to increase their participation in the knowledge economy and to address the County's low level of participation in post-secondary education.

A recent development has been the incorporation of a new mandate for the Office of Research, Economic Development, and Innovation. In the next few years, Lakehead University must strengthen its relationship with regional communities, and embrace its role as a vital contributor to economic development. In order to maintain an effective in-house innovation management program that is able to respond to diverse research goals and outcomes, the University must continue to partner with external innovation professionals with sectoral expertise.

However, Lakehead University is more than a regional university. Approximately 50% of its Thunder Bay students come from Northwestern Ontario and about 55% of its Orillia students come from Simcoe County. Beyond that, both campuses draw extensively from the Greater Toronto Area and will continue to do so in the future. The major drivers of overall enrolment growth are projected to be graduate and international students on both campuses and undergraduate students on the Orillia campus. Sustained enrolment growth on the Thunder Bay campus is critical to the continued development of the University. Technology is changing the definition of the classroom in a way that minimizes the challenges of geography, and provides many opportunities for extending our reach to new communities.

Innovation management and economic development activities directly impact the economic vitality of Lakehead University's surrounding regions. Specifically, regional licensing and start-up company activity create local jobs for our educated youth, both encouraging them to remain in the region and enticing them to return. In addition, Lakehead's industry sponsored research activity supports local industry and provides relevant real-world experience to our students, enhancing their learning experience.

Balancing Breadth and Depth

How will Lakehead maintain its breadth of programming while aspiring to the academic excellence that is generally associated with depth and concentration?

The 2010-13 Strategic Plan adopted comprehensiveness as a strategic direction, and consequently, Lakehead University is committed to maintaining strong core programming in the arts and sciences as well as in professional programs. It is clear from the plan that it defined comprehensiveness as breadth with a particular interest in the expansion of Orillia and the development of new programs. President Stevenson has made *excellence* a priority which implies a focus on depth. Building depth while maintaining a commitment to breadth requires recognition of the need to prioritize and make choices. Enrolment growth will be a key determinant in our ability to address the tensions that exist between breadth and depth at Lakehead University.

Aspiring to Excellence in Teaching, Learning, Research and Service

How does Lakehead fulfill aspirations both as a research intensive university as well as one that is recognized for excellence in teaching, learning and service?

The Strategic Research Plan (2007-2012) stimulated research at Lakehead in an unprecedented manner. The results were significant. Currently, the vast majority of Lakehead's faculty members contribute to the research mission of the University. Given our growing commitment to research and graduate programs, and our recognition of the value and expertise that faculty members who are actively engaged in creative and scholarly work bring to their teaching, we are in the position to further strengthen the quality of undergraduate education at Lakehead. The Boyer Report ⁸ (1997) entitled: *Reinventing Undergraduate Education: A Blueprint for America's Research Universities* was written to address issues of undergraduate education in research intensive universities in the United States. The report includes recommendations, designed to encourage universities to provide an undergraduate education that integrates teaching and research, and these recommendations are worthy of our consideration.

Achieving excellence in teaching, learning, and service requires ongoing reflection and meaningful assessment, as well as strategic use of resources to support them. The University needs to identify meaningful and reliable indicators of teaching excellence so that the achievement of goals in this area are unambiguously stated, tracked and disseminated. Performance indicators include the results of our academic program reviews and professional accreditations, but may also include national teaching awards, quantity and quality of faculty publications on scholarship of teaching and learning, implementation and promotion of innovative teaching strategies that demonstrably increase student engagement in active learning, along with measures of involvement in community service learning. Further enhancement of the Instructional Development Centre and student services will better position the University to encourage and support excellence in teaching and learning development. Likewise, we will be challenged to find ways to value service when it has been historically undervalued in the University. Ongoing professional development opportunities should be available to those in and aspiring to, leadership and service roles at all levels.

As a small university, finding the balance between teaching, research, and service expectations with an eye to excellence in all areas will be complex but essential. We do not currently have much flexibility by which to weight workloads to support those who excel, or aspire to excel, in any one of these categories. Finding appropriate mechanisms will be essential to teaching excellence, continuing to build research capacity and creating a culture in which talented individuals will aspire without reservation to meaningful leadership and service-related roles.

Meeting the Demographic Challenge

How does Lakehead respond to the impact that demographic changes are going to have on its future student body within a revenue structure that is predominantly based on enrolment?

In the next 20 years the number of people aged 18-21 years in Northwestern Ontario will decline by 30%. At the same time the proportion of this age group that is of Aboriginal descent will grow

⁸ The Carnegie Foundation's Boyer Commission, [Reinventing Undergraduate Education: A Blueprint for America's Research Universities](#) (The Boyer Report, 1997).

from 25% to 40%. The challenge is clear. Lakehead University must, over the next two decades, play a role in helping to increase dramatically the proportion of Aboriginal students who are academically prepared to go University. Not only do Aboriginal students present Lakehead with an opportunity for growth, but Lakehead has a long-standing social obligation to these students, enshrined in the institution's mission statement to serve the educational needs of the Aboriginal population in Northern Ontario, and now, Central Ontario as well. We will need to ensure we offer quality programs, facilitate access, and provide the necessary academic support services to successfully recruit and retain Aboriginal students, and at the same time reach out further to potential students in the GTA, the rest of Canada and internationally. This will require significant investment.

Balancing Changing Expectations with Ongoing Commitments

How can Lakehead respond to society's high expectations for universities yet operate within the clear constraints of public policy, public funding, and academic discipline as the basis of organization?

In a global and knowledge economy, we can assume that a university education will significantly impact the economic growth of the country. Universities are seen as gateways to the future, engaging in cutting-edge research and innovation, and creating instantly successful spin-off companies in our communities. Responding to this set of expectations means constant change, incredible flux and adaptation. However, the organizational framework of universities is based on stability and slow, muted responses. There are three components to this framework. The first is the policy/regulatory framework based on quality assurance and strategic direction. Second is the funding formula that creates long delays between the first enrolment impact of a strategy and any positive funding outcomes. Third is the inability of a university to quickly and easily reallocate resources from one discipline or academic unit to another in a fair and effective way. If a university errs too far on the side of experimentation it will be unable to secure the resources needed to support emerging areas and may potentially take resources from strong and vital core areas. If it errs too much on the side of conservation it will find itself unable to lead change and will miss opportunities for growth and innovation. Nowhere is this truer than in making a university education more accessible, for this cannot be successful without first finding new pedagogical approaches, new forms of recruiting and new types of services and then integrating them into a university in a seamless manner.

All of the challenges can be met if one assumes increasing resources. It becomes more difficult if the level of resources remains stable or decline. There are three major reasons why the third scenario is likely to define our near-term reality. First is the traditional counter-cyclical impact as the federal and provincial governments reduce the deficits they created during the last recession. Second is the traditional electoral cycle in which governments make the tough decisions in the first year after an election. Third is the previously mentioned policy framework which is designed to slow down development and particularly limit the expansion of undergraduate universities into research and graduate programs.

The Higher Education Quality Council of Ontario (HEQCO) released (2010) a report entitled *The Benefits of Greater Differentiation of Ontario's University Sector*.⁹ Adoption of the recommendations included in the report could undermine Lakehead University's goal to become

⁹ Harvey P. Weingarten & Fiona Deller, *The Benefits of Greater Differentiation of Ontario's University Sector*, (released by The High Education Quality Council of Ontario [HEQCO], 2010).

one of the top research intensive institutions in Canada and impact on support for existing and new graduate programs. A model of differentiation hampers the ability of universities to respond to opportunities, changes in markets, community, region, research and innovation. Lakehead's isolation and mandate to serve the needs of Northwestern Ontario and Simcoe County will only be achieved as a comprehensive and research intensive institution.

Internal constraints on operations as Lakehead University plans for the next five years include growing deferred maintenance costs, low returns on pension plans and endowments, and debt funding for new buildings in Thunder Bay and Orillia. While Lakehead is better positioned than most Ontarian universities, there is very little room for taking on additional debt. At the same time, salaries must remain competitive with other universities to ensure that Lakehead can continue to attract and retain quality faculty. Most of the investments described above have longer term results but that leaves the immediate concerns unresolved. Strategic investments must be made in the short term that will result in longer term returns.

Our Core Strengths

Lakehead University's core strengths and future opportunities are clearly linked to our unique geographical positioning in Northern Ontario and Central Ontario. As a regional university, we have been necessarily responsive to the needs of our northern, and rural and remote communities, offering a comprehensive mix of arts and science degree programs in combination with professional programs at both the undergraduate and graduate level. By our very presence we contribute to the economic growth and development of our regions, as do our graduates who enjoy high employment rates in a broad range of careers. Our connections to community are explicit and ever expanding as we move to enhance relationships, program offerings, and student learning opportunities through articulation, outreach, community service, and experiential learning programs.

With an emphasis on enhanced learning technology platforms and research intensity, we have expanded the quality and quantity of our program offerings to users throughout our region and beyond. We have embraced the opportunity to work with Aboriginal peoples and are now recognized as one of the foremost institutions in the country in this regard.

Over the past, Lakehead has successfully established college/university pathways that have brought new students to the University to complete degrees. We have an opportunity to build on our past successes and to be a leader in enhancing college/university pathways and improving student mobility. This is excellent timing as the government, in partnership with colleges and universities, is committed to putting in place a credit transfer system that is student centred. Their vision for credit transfer is designed to make it easier for students to navigate the post-secondary education system, reach their preferred educational destination faster, and enter or re-enter the labour market sooner. The government will support transfer initiatives through the provision of additional revenue.

Lakehead University has a unique identity in the Ontario post-secondary system in that it has a relatively small student body and faculty complement while providing comprehensive programming. Students can choose from an impressive range of programs normally only available at much larger institutions, and yet study in relatively small classes. Students at

Lakehead have many opportunities to engage with their instructors in learning experiences in and out of the traditional classroom environment.

Lakehead University provides:

- choice in strong undergraduate and graduate programs,
- research excellence,
- academic rigor in a caring environment,
- opportunities for experiential, inquiry based, and blended learning experiences,
- small class sizes,
- cultural diversity,
- safe campus environments,
- advanced instructional technologies,
- leadership in environmental sustainability,
- connections to our local and regional communities,
- successful alumni, and
- spectacular geographic locations in Northwestern and Central Ontario.

Lakehead University Academic Plan

Chapter 2: Imagining the Future

As a University that has a responsibility to serve its regions, we are resolved to retain and build on our existing “comprehensiveness” over the next five years and to meet the challenges that we have identified. Lakehead University will continue to offer a breadth of programs which includes a mix of professional degree programs including both Medicine and the new Law degree program. We will be learner-centred, regionally, nationally and globally connected, and have both undergraduate and graduate programs. We will also deliberately address the need for depth in our faculties, programs, and curricula by making careful decisions about where to invest limited resources to support enrolment growth and to ensure the quality of academic programs. The case for investments must be made at the academic unit and faculty levels, and requires faculty and staff engagement. Lakehead is committed to excellence in teaching, learning, and research, and developing professional skills, technical expertise, and artistic creativity. We will continue to prepare graduates to thrive in a competitive job market.

Our two-campus University will continue to provide multiple opportunities for responding through our programs, our research, and our service and community outreach activities to the regional needs we are faced with both in Northern and Central Ontario. Lakehead University will uphold the commitment to educating students who are recognized for leadership and independent critical thinking and who are aware of their social and environmental responsibilities. First-generation¹⁰ and mature learners will be welcomed and supported at Lakehead University. The University will strive to be a leader in furthering the educational aspirations of Aboriginal peoples.

Financial sustainability at Lakehead University is required in order to continue to commit to quality in undergraduate and graduate program development and delivery, innovation in scholarship, teaching and learning, and to address diversity in and outside of the classroom experience. In turn, a continued commitment to quality is required for financial sustainability. Lakehead University will make every effort to meet its goals guided by the Strategic and Academic Plans, as well as by a long range development plan for both campuses that is within our financial means. Efforts will be increased to optimize revenues through enrolment, special mission related grants, research, fundraising, and a variety of creative external initiatives. Enrolment targets of 9,000 students (1,500 of these at the Orillia Campus) with 10 percent of the students on the Thunder Bay Campus at the graduate level have been projected for the year 2013.

Lakehead is committed to social justice both within the University and beyond. Social justice refers to the belief that the world should be organized in ways that not only allow for, but proactively promote equity, fairness, and dignity, as well as solidarity of community members across societies and cultures. Proponents of social justice work to address inequities based on existing differences (such as income, race/ethnicity, religion, gender, ability, sexual orientation, age, political beliefs etc.) as well as on other emerging grounds of discrimination. Social justice

¹⁰ Lakehead University defines a first generation student as a student for whom neither their mother nor their father has obtained a university degree

interrogates and attempts to change the social conditions that prevent some people from having access to decent housing, food, education, and employment. Social justice encompasses the belief that all members of society should have the opportunity to flourish, be valued and cared for, feel a sense of dignity in their everyday lives, and participate in their worlds as empowered social agents.

At Lakehead, we will indeed work to create the conditions whereby all people can flourish and continue to actively combat all forms of oppression and discrimination. Given our regional and national context, central to our commitment to social justice is respect for Aboriginal worldviews and knowledge, recognition of the historical and current problems facing Aboriginal peoples, and a clear intention to tackle these issues proactively.

But our commitment to social justice also extends beyond Aboriginal issues. Respect for diversity is integral to social justice. At Lakehead University, diversity is reflected in its people, its programs, and its curriculum. We understand diversity to be complex, referring not only to the identities of individuals, but also to the rich variety of perspectives, ideologies and scholarly traditions one should expect to find at a university. This diversity should not be merely tolerated, but embraced.

Lakehead University recognizes that vibrancy and growth in research are strongly linked to research-intensive programs where students engage in research both on and off campus, and in both undergraduate and graduate programs. Continuing to strive to reach our aspiration to be in the “top 25” will result in increased participation, intensity, productivity, funding, partnerships, and will enrich the undergraduate and graduate student experience. Acknowledging its role of serving populations of Central and Northern Ontario, Lakehead University will support and invest in basic and applied research, programs and infrastructure that address local and regional economic development opportunities. Innovation management and economic development activities directly impact the economic vitality of Lakehead’s surrounding regions. Regional licensing and start-up company activity creates local jobs for our educated youth, both encouraging them to remain in the region and enticing them to return. In addition, Lakehead’s industry-sponsored research activity supports local industry and provides relevant real world experience to our students, enhancing their learning experience.

There is a clear understanding that research informs the curriculum, and that becoming a critical thinker requires a comprehensive understanding of evidence gained through inquiry. Our undergraduate and graduate programs will be enriched through ongoing reflection and revision, integration of research into the undergraduate and graduate learning experience, and support for teaching and learning development and delivery. We will have to develop meaningful metrics to assess and track our performance in teaching and learning and as a learner-centred university.

All research, scholarly and creative activities will be valued by Lakehead University. However, Lakehead University recognizes that in order to become one of the top research-intensive universities, there are benefits to focusing on priority research areas where we have competitive advantages and strengths. The following six research priorities¹¹ have been refined through a process of consultation led by the Senate Research Committee and present opportunities for interdisciplinary research and/or partnerships with not-for-profit organizations, governments, and the private sector. In addition, these areas provide opportunities to access resources such as Canada Research Chairs and Canada Foundation for Innovation grants. Priority research areas

¹¹ Research Priorities were introduced as part of the 2007-2012 Strategic Research Plan

present foundations on which to develop new graduate programs, especially at the PhD level, and are described in greater detail in Appendix 3. The six research priority areas are:

- Advanced Systems and Technologies
- Cultures, Societies, and Social Justice
- The Environment and Natural Resources
- First Nation, Metis and Inuit (Aboriginal) Research
- Health Research Across the Life Span
- Northern Studies

It is important to note that the areas of research priority outlined above do not represent the full scope of our research expertise or total research capacity.

Lakehead will build on its existing participation in the global community through increasing the presence of international students and faculty on our two campuses and engaging in global projects and partnerships. The ability of Lakehead to work with the local and global communities of which it is part, and to connect these communities together through collaborative learning, will be facilitated through its use of advanced technologies.

By addressing regional, social and economic challenges and emerging economic opportunities located in our regions, the University will strengthen its relevance to its major stakeholders. Internationally, Lakehead will actively pursue publically funded community-based technology transfer and economic development, research dissemination to institutions all over the world, as well as partnerships with international networks and institutions. Over the period of this Academic Plan, our alumni, faculty and staff will be encouraged to engage as Lakehead University ambassadors.

We recognize the role that we as stakeholders of the University and community play in environmental stewardship. This is an important responsibility, one that we share as a collective, and one that will carry the institution and our community partners into the future. As one example of our stewardship, Lakehead University is committed to excellence and innovation in green technologies providing creative solutions related to issues of climate change, alternative forms of renewable and clean energy, recycling and sustainability. A focus on green technologies will support the establishment of interdisciplinary graduate programs which link disciplines such as engineering, forestry, business, health and science. Green technology-added values will further link our Thunder Bay and Orillia campuses and the regions beyond. There are a number of other interdisciplinary and community-based initiatives at Lakehead that have been and/or can be pursued.

Proposed Academic Priorities

1. Achieve Excellence in Teaching, Learning, and Research
 - High Quality Undergraduate and Graduate Programs
 - Engaged and Successful Students, Faculty and Staff
 - Intense Research, Scholarly and Creative Activity
2. Extend Community Engagement and Outreach
3. Strengthen our Commitment to Social Justice

4. Enhance our Support of First Nations, Métis and Inuit (Aboriginal) Students
5. Expand our International Reach

Chapter 3: Framing the Future - The Academic Action Plans

Over a period of 14 months, the Academic Planning Committee met regularly and facilitated and/or participated in more than 45 meetings with members of the academic community, including individual consultations, small group discussions, committee visits and open forums. The Committee collected and synthesized numerous written submissions, utilized current and past institutional data, and were informed by university reports and plans from across the country and beyond. The work has resulted in a vision that is positive, yet realistic. As a result of the University Community's input and commitment to the academic planning process, the Academic Action Plans will guide the University's efforts over the next five years.

The action plans are intended to be non-hierarchical and the strategies are deliberately expressed at a universal level in order to allow for the faculties, departments, schools, and other units to interpret them in ways that are relevant for a multitude of different circumstances and specific operations. Not every action that has been included will be relevant to every academic or support unit. Planning at the Academic Unit level was initiated this past term and will result in unit level action plans that align with the university academic priorities and strategies.

The Lakehead University Academic Plan is meant to be both a living and relevant document that will be reviewed and refreshed as necessary. One of the first actions, following approval of the Plan, will be to establish a set of measures and benchmarks for us to use to assess our progress and success, as well to allow us to adjust where necessary and appropriate. The preparation of an annual report, led by the Office of the Provost and Vice-President (Academic), will present our progress towards established benchmarks and will be submitted to the Senate Academic Committee and posted on the University website. This will go hand in hand with the ongoing review and assessment of the academic plans prepared by the Faculties and Academic Units.

Action Plans have been developed for each of the following priorities (click on each of the following links to access the individual action plans):

1. Achieve Excellence in Teaching, Learning, and Research
 - [High Quality Undergraduate and Graduate Programs](#)
 - [Engaged and Successful Students, Faculty and Staff](#)
 - [Intense Research, Scholarly and Creative Activity](#)
2. [Extend Community Engagement and Outreach](#)
3. [Strengthen our Commitment to Social Justice](#)
4. [Enhance our Support of First Nations, Métis and Inuit \(Aboriginal\) Students](#)
5. [Expand our International Reach](#)

Appendix 1

Summary – Implementation of Academic Plan 2006 -2010 Undergraduate Programs (June 2010)

ITEM		ACTION 2006-2010	Senate Committee Involvement/ Administrative Offices
1.B.1.a (1)	3-Year Degree Programs	<ul style="list-style-type: none"> No new 3 year programs were added to the Lakehead University academic program portfolio 	SUSC
1.B.2.a	3-Year Degree Programs	<ul style="list-style-type: none"> Discussion initiated on reducing 3 year direct entry programs in 2008/2009 BSc Chem 3year eliminated 	SUSC SBC Registrar Admissions
1.B.1.a (2)	4-Year Degree Programs	<ul style="list-style-type: none"> All proposed 4 year “new programs” should be 20FCE One Exception (20.5FCE) was made for Faculty of Business Administration HBComm Administrative Studies (Orillia) 	SUSC SBC
1.B.1.a (3)	Academic Majors	<ul style="list-style-type: none"> Minimum of 5FCE is required for all majors 	SAC
1.B.1.a (4)	Academic Minors	<ul style="list-style-type: none"> At the Senate Meeting of June 4, 2007 (item #8, Report of the Senate Academic Committee) a motion was approved regarding the definition of minor programs. (See http://calendar.lakeheadu.ca/current/contents/admissions/admdegr.html.) SUSC verified that all minors offered at LU conform to the new minor regulations. Final report on Minors completed 2010 SBC will be revisiting the list of approved minors to consider issues related to their financial sustainability 	SAC SUSC Registrar

1.B.2.c			SUSC Report SBC
1.B.1.a.(5)	1 Year Transition Programs, Work Experience Programs, Or Special Degree Programs	<ul style="list-style-type: none"> • Programs need to be reviewed on a case by case basis • Status of these review activities is unknown 	
1.B.1.c 1.B.2.f. II.B.1	Certificates	<ul style="list-style-type: none"> • Criteria for certificates defined and approved • All existing certificates reviewed and 12/21 are ongoing • All proposals for new certificates are reviewed and approved by SCEDLC and SBC • Certificate proposals that involve new courses, or changes to existing courses, that are part of degree requirements, will be referred first to SUSC for course review. Following course approval by SUSC, the certificate proposal is forwarded to SCEDLC and SBC for review and approval. • All but one of the active certificates are defined in terms of learner outcomes 	SCEDLC/SAC Review and Approval process involves SUSC SBC SCEDLC
1.B.2.b	Low Enrolment/Low Graduation Rate 4 And 5 Year Programs	<ul style="list-style-type: none"> • SUSC subcommittee tabulated data for those programs with low enrolments/low graduation rates • The summary report, submitted to the VP Academic & Provost (Feb 1, 2010) was based on the collection and analysis of a number parameters that included not only the number of graduates, but also enrolment levels, tenured faculty resources, service teaching, FCE/FTE ratio, and class size. 	SUSC SBC Admissions/ Recruitment
1.B.2.b	Regular Review Of 4 And 5 Year Undergraduate Programs	<ul style="list-style-type: none"> • Undergraduate Program Review Schedule was revised 2008/2009 • Reports for two site visits conducted prior to 2008 were forwarded to Senate and the Board of Governors • Two site visits conducted Winter 2009 • Seven reviews completed 2009/2010 	SAC – SUPR Office of VP Academic

			IDC
III.A III.B	Alignment With University Mission - Commitment Statements Commitment To Participation In Service Learning	<ul style="list-style-type: none"> • Academic units have demonstrated through learner outcomes a commitment to educating students who will be recognized for leadership and independent critical thinking and who are aware of social and environmental responsibilities. • SUSC has collected info; final report was presented to VP Academic & Provost on Jan 31, 09. Reported to Senate March 2009. • Requirement to show how program learner outcomes are aligned with the 2010 Strategic Plan Mission is currently a requirement for new program proposals and will be required as part of the IQAP for both new program and cyclical program review. • Data collected for each unit's involvement in Service Learning. • Working group formed in 2009 to develop an action plan to enhance service learning activity at Lakehead 	SUSC IDC SUSC SUSC

Appendix 2

Summary – Implementation of Academic Plan 2006 -2010 Graduate Programs (June 2010)

ITEM		ACTION 2006-2010	Senate Committee Involvement/ Administrative Offices
1.B.1.b.(1)	Any Proposed New Program Will Conform to the Bylaws of OCGS	<p>All new programs that were proposed conformed to program expectations outlined in the Bylaws of OCGS:</p> <ul style="list-style-type: none"> • M.E.S – Northern Environments and Cultures • Ph.D. Biotechnology • M.Sc. in Engineering – Electrical And Computer Engineering • M.Sc. in Computer Science • MBA - Business • Type III Diploma in Kinesiology • Ph.D. Chemistry and Material Science 	Faculty of Graduate Studies Senate
1.B.1.b.(2)(a)	Critical Mass of Core Faculty in Field Of Study	The criterion for a critical mass of “Core Faculty” in new programs has been met. All masters and doctoral programs have at least 4 “Core Faculty” in an approved field of study.	Faculty of Graduate Studies Senate
1.B.1.b.(2)(b)	Core Faculty – Research Intensity	The eligibility criteria for membership in the Faculty of Graduate Studies ensure that all core faculty are “research-active” and productive.	Faculty of Graduate Studies Senate
1.B.1.b.(2)(c)	Teaching Effectiveness Of Core Faculty	The results of the 2007 Graduate and Professional Student Survey were presented and discussed with each graduate program coordinator and faculty dean during Fall 2008. Discussion included examining strategies for addressing areas of concerns. Plans for follow up were made but not completed.	Faculty of Graduate Studies Office of Inst. A

		(Note: The NSSE is only administered to undergraduate students)	& Gov. Relations
1.B.1.b.(2)(d)	Demand	Data related to demand has been provided to SBC as part of the internal review of all new graduate program proposals.	Faculty of Graduate Studies SBC Office of Inst. A & Gov. Relations
1.B.1.b.(2)(e)	Sustainability	All new and existing programs have been required to submit a plan related to sustainability as part of the internal review process. <ul style="list-style-type: none"> There have been ongoing discussions and monitoring related to <i>Time to Completion</i> and Requests for <i>Extension</i> for existing programs, one measure that is related to “appropriate academic progress”. 	Faculty of Graduate Studies SBC Senate
1.B.1.b.(2)(f)	Interdisciplinary	Every graduate program brief prepared as part of the OCGS review process is required to address interdisciplinarity. All briefs also provide an overview of the work completed by graduate assistants. Currently Lakehead has four programs with an explicit interdisciplinary focus: <ul style="list-style-type: none"> Collaborative Masters Degree with Specialization in Women's Studies Masters Degree with Specialization in Gerontology M.E.S – Northern Environments and Cultures PhD in Biotechnology 	Faculty of Graduate Studies Senate
1.B.1.c	Certificates	Criteria for certificates defined and approved by SCEDLC <ul style="list-style-type: none"> There is currently one certificate, the <i>Nurse Practitioner Certificate</i> that includes graduate level courses. All proposals for new certificates are now reviewed and approved by SCEDLC and SBC Certificate proposals that involve new courses, or changes to existing courses, that are part of graduate program degree requirements, will be referred first to the Faculty of Graduate Studies for course review. Following course approval by the Faculty of Graduate Studies, the certificate proposal will be 	Faculty of Graduate Studies SCEDLC SBC

		forwarded to SCEDLC and SBC for review and approval.	Senate
1.B.2.e	Internal Review of Grad Programs prior to submission to OCGS	<p>The following graduate programs prepared a brief, as part of the internal review process of existing graduate programs.</p> <ul style="list-style-type: none"> • M.Sc. Chemistry • M.A. Economics • M.A./ M.Sc. Mathematical Sciences • M.Sc. Biology • M.A in English • MSW Social Work • MA/Ph.D. Clinical Psychology • MSc Experimental Psychology 	<p>Faculty of Graduate Studies</p> <p>Senate Budget Committee</p> <p>Senate</p>
1.B.2.g	VP (Academic) Progress Report	Vice-President reported to Senate June 4, 2007 on the tasks associated with the Academic Plan	Office of the VP
II.B.1.	Learner Outcomes	<p>Learning Outcomes established for 20% of graduate degree programs (Report to MTCU 2008).</p> <ul style="list-style-type: none"> • All new graduate programs have been required to submit learner outcomes as part of the internal review brief. (As of September 2010, the new Institutional Quality Assurance Process will require all programs to submit program learner outcomes and to show how these align with the Graduate Program Degree Level Expectations. Over the course of an 8-year cyclic review of existing graduate programs, learner outcomes will be established for all programs.) 	<p>Faculty of Graduate Studies</p> <p>IDC</p>
II.B.2.	Requirements for New Programs	All new programs have been required to develop a proposal which addresses all the criteria listed	<p>Faculty of Graduate Studies</p> <p>SBC</p> <p>Senate</p>
III.A III.B	Alignment With University Mission - Commitment Statements	<p>Graduate programs have not addressed the commitment to educating students who will be recognized for leadership and independent critical thinking and who are aware of social and environmental responsibilities.</p> <p>As part of the IQAP requirements all new program and cyclical</p>	Faculty of Graduate Studies

		program reviews will be required to demonstrate alignment of program learner outcomes with the Mission and commitment statements.	
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Appendix 3

Description of the Revised Research Priorities – Prepared by the Senate Research Committee (2012)

Advanced Systems and Technologies

Advanced systems, comprising integrated hardware, software, and communication links, form an essential fibre in modern society and are particularly important for our economy and environment. As examples, the efficiency of paper mills, electric power stations, renewable energy and its penetration into the electricity grid, mineral exploration, and extraction operations, can be enhanced significantly through advanced systems. Isolated industrial facilities could be fully automated and controlled from a central location via real-time monitoring achieved through innovations in fiber laser technology, and with technological advances in remote sensing devices and reliable communication links. Information and communications technology, control systems, along with advanced computing technologies, mobile computing for learning and health-related applications, and robotics stand to make a difference in our world.

Similarly, research conducted in environmental biotechnology, biomedical and molecular biotechnology, as well as in material science and nanotechnology, can have a significant impact on society. Integration of biotechnology research (broadly defined as the use of living organisms, or cellular and bio-molecular processes, to make new products, solve problems, or provide new methods of production) with advances in material science stemming from research in the traditional sciences is crucial to harness the full potential of these and other related research areas, and could result in significant advances in the biomedical field and industrial applications.

A significant group of faculty members from various Faculties work in these areas. As well, undergraduate and graduate students, post-doctoral trainees, and visiting research engineers/scientists are engaged in research activities related to various aspects of advanced systems and technologies. Several laboratories and research centres provide the necessary infrastructural support and interdisciplinary focus to foster innovations and research in these research areas. Research is typically supported by grants from NSERC, CIHR, CFI, OIT and FedNor.

Cultures, Societies, and Social Justice

Lakehead University has a strong tradition of research focusing on the complex ways in which cultures and societies around the world develop, communicate, and organize themselves. Much of this research aims to contribute to social justice, which refers to the belief that the world should be organized in ways that allow for and promote equality, fairness, dignity, and solidarity between community members and across societies and cultures. Proponents of social justice work towards addressing inequalities based on differences such as income, race, gender, ability, and sexual orientation. These inequalities can include restricted access to health care, education, suitable housing, legal services, resources including healthy food and clean water, freedom of thought, political liberty, and basic human rights. Social justice is achieved when all

members of society flourish and when all people are valued and cared for, feel a sense of dignity in their everyday life, and can participate in their worlds as empowered social agents.

Researchers working at Lakehead University not only examine pressing issues facing societies today but also important forces shaping cultures and societies such as popular culture, the arts, communication, education, politics, globalization, the past and our relation to it, and the future and our hopes for it. Research in this priority area includes those who are active in the field of cultural production itself through their creative and performance activities and also those who engage in text-based analysis and criticism.

Researchers working in this area, from a broad variety of disciplines, have a strong history of attracting Tri-Council funding and faculty members in the creative disciplines have received both Canada Council and Ontario Arts Council funding. Researchers in this area also bring in substantial research funding from organizations such as FedNor, the Canadian International Development Agency, the International Development Research Centre and the Trillium Foundation. Lakehead University researchers have established strong ties to local and regional community and development organizations, to Aboriginal communities, and to international scholarly organizations.

The Environment and Natural Resources

Interdisciplinary research with application to the environment and the natural resource sector has emerged as a strength given Lakehead University's locations. The Thunder Bay campus is situated in the boreal forest, one of the largest ecosystems on earth, and in the Lake Superior watershed; the Orillia campus is situated in southern Ontario where different land uses abound (e.g., agriculture, housing, recreation, industry). For both regions an important challenge is to maximize the many opportunities the land affords while reconciling various conflicting activities and preventing environmental degradation. Hence, research to maximize the enjoyment derived from the environment while supporting resource discovery, extraction and sustainability, and environmental health, is vital. Such research contributes to the social and economic aspects of the environment and transcends the regional boundaries of the University.

Lakehead University researchers are known as experts on a range of areas related to the environment and natural resources. Examples include: climate change, community resilience, ecology, environmental biotechnology, environmental education, environmental health, environmental literature, environmental psychology, food security, green chemistry, mining and exploration, mitigation and adaptation, nature-based tourism, outdoor recreation, parks and protected area management, water quality, watershed protection, and wildlife conservation. New knowledge to address environmental, social and ethical challenges, and to enhance natural resources discoveries, is valuable to various stakeholders. Furthermore, research in areas such as bio-fuels, environmental assessment, environmental and site remediation, mining and exploration, resource stewardship, sustainable forest management, value-added and non-wood forest products, and urban forestry, are useful to industry and resource-based communities.

Over 50 researchers at Lakehead University work in this area and have an excellent record of research funding and publications; these researchers often work in interdisciplinary teams and have a strong history of collaborative work with the private sector, government, and the community. These researchers have been very successful in attracting external research

funding the Tri-Council as well as from local industry and other organizations (e.g., UNESCO, Living Legacy, Forestry Futures, CFI).

First Nations, Métis and Inuit (Aboriginal) Research

Lakehead University recognizes the importance of advancing Aboriginal (First Nation, Métis and Inuit) research at Lakehead University. The prominence of the Aboriginal agenda in the University's mission statement is an indicator of continued efforts to build capacity in Northern Ontario, in particular, and to join the provincial and national focus on northern and Aboriginal opportunities and challenges.

The impact of Aboriginal research focused on community needs in areas ranging from the arts to health, education, science, land management and culture, is far reaching. The revitalization of Aboriginal languages, culture, and self-governance currently underway can only be strengthened by community-based research efforts which are encouraged by the new Tri-Council Policy Statement on Research Involving the First Nations, Inuit and Métis Peoples of Canada. In addition, northern ecosystems will be protected and the economy enhanced by the addition of highly trained personnel in new and emerging fields of study. Such tangible returns will include employment, training, and further educational and research opportunities for Aboriginal communities.

Over 30 researchers at Lakehead University are involved in research projects and/or partnerships with Aboriginal communities. Financial support typically comes from the national research councils and other federal and provincial agencies. Regional sources, including the private sector and foundations, also support Aboriginal research and the development of research capacity. These research efforts are strengthened by Aboriginal representation in all aspects of university governance, and particularly through the Ojibwa Aboriginal Governance Council, and by the appointment of an Aboriginal Research Facilitator in the Office of Research. Further, research strength exists in community-initiated collaboration with Aboriginal organizations and communities, and in established and emerging Aboriginal programs. Lakehead University has one of the highest Aboriginal student enrolments for any university in Canada and is committed to have Aboriginal research as one of its priorities.

Health Research Across the Life Span

Researchers in this area aim at making a concrete difference in the health of our communities. The research covers the age continuum, from children to older adults, underscoring that health in old age is often determined by one's health in youth. The research is also focused on the health continuum, from healthy individuals to those with special needs or with poorer health status, and ultimately to those at the end of life. The research conducted also has a focus on Aboriginal and Northern/rural issues, calling attention to the fact that Northwestern Ontario offers considerable challenges to the maintenance of good health.

Faculty members and trainees from various departments and faculties of Lakehead University are involved in health-related research. While health research is already vibrant at Lakehead University, its potential for growth and for the development of fruitful partnerships, both within

academe and with government and private partners, is considerable, and is reflected by ongoing discussions to develop new graduate and undergraduate programs.

The research is supported with research grants from national research councils and other foundations. Several of the university research centres are directly involved in the study of health-related issues. New partnerships are continually developed with community partners (e.g., St. Joseph's Care Group, Thunder Bay Regional Health Sciences Centre) to enhance health research and its translation. Through the activities of the University researchers and their partners, health research will continue to grow at Lakehead University, and will provide tangible societal benefits for the region and beyond.

Northern Studies

Northern-based research has always been a cornerstone of Lakehead University and has added a distinct element to its identity. Originally limited to Lakehead University's regional mandate to serve Northern Communities, the scope of such research is now international, encompassing the entire circumpolar north. There is a growing need to increase our commitment to northern research to deal with emerging regional, national and international issues, including the areas of First Nation, Métis, and Inuit issues, education, health, law, sustainable development, and resource management.

Our reputation and expertise in the field, location of our institution, and key position in national and international organizations are all indicators of the potential and importance of northern research at Lakehead University. Programs and initiatives from within the university and through the activities of the relevant research centres also assist northern research. Through our role in national and international partnerships such as the University of the Arctic, researchers at Lakehead are empowering northerners and northern communities through advocacy, education, and shared knowledge.

Researchers working in the area of northern studies contribute significantly to the university's growing reputation as a research-intensive institution, having been highly successful in attracting external funding from the Tri-Council, as well as from other federal, provincial, and territorial funding agencies.