



Positioning NAIT

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This document sets out preliminary thoughts on positioning NAIT to be the most relevant and responsive postsecondary institution in Canada, and to become one of the world's leading polytechnics.

NAIT is, and will remain, a polytechnic. Building on a strong polytechnic foundation, we will focus at a deeper level on providing hands-on and pragmatic education that is employer-driven based in technology, and conduct applied research with industry to solve real world problems. And we will focus on becoming outstanding in our four program areas: science, technology and the environment; trades; allied health care; and business. We will build on our past accomplishments, becoming even more relevant to Alberta, and more responsive to its emerging needs. That is, we will focus on our competitive advantages – relevance and responsiveness – and take each of these competitive advantages to a far higher level. In doing this we will adopt best practice, as found in other leading polytechnics and in the broader postsecondary system. Our academic model will evolve, building on our strengths as a leading polytechnic.

This document has two parts. The first presents observations about the current state of NAIT. The second sets out a vision for NAIT in 2021 – that is, a vision of what NAIT can look like in 10 years.

I. Observations about NAIT

A primary goal for my first four months was to observe and evaluate NAIT, including its strengths and weaknesses. What did I learn? NAIT is clearly a polytechnic. The role it plays in Alberta and Canada is defined by this fact. NAIT is one of the largest polytechnic institutes in Canada, and plays a central role in Alberta's economy. NAIT also has a workforce that has a strong conviction to the institution.

Let me discuss further NAIT as a polytechnic, its role in Alberta, and its fundamental strengths.

NAIT is a Polytechnic

There are three distinct types of postsecondary institutions in Canada; polytechnics, universities, and colleges. Each serves a very different purpose. In defining what it means to be a polytechnic, let me provide language from Polytechnics Canada that I believe captures the essential elements,

“... polytechnic institutions deliver a broad range of applied, hands-on and pragmatic education that is employer-driven, based in technology and that leads to high-quality

employment for graduates.”¹ ... “One of a polytechnic’s distinguishing features is a close working relationship with industry to help businesses grow and create high-quality jobs. Polytechnics conduct applied research based on industry needs aimed at specific commercial objectives.”²

That is, polytechnics are defined by what they teach (technology based pragmatic programs), how they teach (hands-on), their relationship to industry (a partnership), and the nature of research they engage in (applied).

NAIT aligns perfectly with this definition. NAIT is *defined by what we teach* – we provide technology-based education. Our programs fall within four groups or pillars:

- Science, technology, and the environment.
- Health care
- Trades
- Business, including new venture and commercialization

These pillars are of roughly equal size and importance.

NAIT is *defined by its learning method*. We deliver programs through a focus on hands-on learning. That is, students learn by doing, and then apply rigorous theory to generalize their knowledge.

NAIT is *defined by its pragmatic programs*. We are preparing our students for real jobs and real careers.

NAIT is *defined by its research that focuses on solving real problems* for corporations and industry in Alberta.

And NAIT is *defined through its partnership with industry*. These relationships play a critical role in ensuring that our programs and research are relevant and respond to emerging needs.

Importance to, and Place in, Alberta

NAIT exists within Alberta, and is part of a broader postsecondary structure. Alberta’s colleges, polytechnics, and universities will provide the foundation for our future. Postsecondary education in Alberta is strong.

And NAIT is fortunate to exist in this context – that is, to exist in Alberta. Our province is defined by many characteristics. It is the most vibrant province in Canada. It has the strongest

¹ Polytechnics Canada, quick facts, referenced September 22, 2011

http://www.polytechnicscanada.ca/publication_resources/quick_facts

² Polytechnics Canada, polytechnics & industry, referenced September 22, 2011

http://www.polytechnicscanada.ca/polytechnic_advantage/industry_connections_solutions

financial base in Canada, creating both wealth and jobs. Our economy is the most robust in North America. Alberta is defined by its place in Western Canada, as one of the world's largest oil and gas producers, and by entrepreneurship and innovation.

An important strength of NAIT is its positioning as a polytechnic. Our programs are essential for Alberta's future. This is perhaps best seen through examining labour market and program demand projections. In the Campus Alberta Planning Framework 2010³ the following is noted: "the greatest proportion of labour market shortages will be in the following program bands: Trades and Technology (30.3%); Health Sciences (27.5%); Business (16.3%); and Physical, Natural, and Applied Sciences (14.9%)." These programs almost perfectly parallel our four program pillars – that is, almost 90% of future market shortages relate to our four program areas. The report also affirms that these will be the areas of greatest future program demand: "Program areas with the greatest labour market demand also have the greatest learner demand, with the number of turnaways highest in the Health Sciences, Trades and Technology, and Physical, Natural, and Applied Sciences program bands."

NAIT is one of Canada's largest polytechnics. To meet current and future labour market needs, Alberta will rely heavily on NAIT. The future prosperity of Alberta will depend on its postsecondary system, but especially on its polytechnics. The province of Alberta has taken a system-wide approach to higher education. This is a very good thing! In this system NAIT is appropriately defined as one of two polytechnics in Alberta, the other being SAIT Polytechnic.

Solid Fundamentals

NAIT has strong programs, solid financials, and dedicated employees.

Our programs are strong. Over 90% of our students are satisfied with the quality of their education and the quality of instruction. Almost all find meaningful employment shortly after graduation. Almost all employers are satisfied with graduates' technical skills and knowledge.

Our financials are rock solid. We have a significant accumulated surplus, almost no debt, clean financial statements, and meet budget. This likely makes us unique in the Canadian postsecondary system.

Our employees are dedicated to NAIT. The Engagement Survey demonstrated that on the important indicators of the overall health of NAIT (the more global metrics), we are doing very well. Overwhelmingly, employees would recommend NAIT to potential students and as a place to work, like their jobs and who they work with, and are glad they work at NAIT.

By way of summary, while there are areas for improvement NAIT, building on its polytechnic foundation and solid fundamentals, is very well positioned for transformational change.

³ "Campus Alberta Planning Framework 2010: Profiling Alberta's Advance Education System". Government of Alberta. Pages iv, v, 24. This report is available at <http://aet.alberta.ca/>

II. NAIT in 2021

What will NAIT look like in 10 years? The following reflects my beliefs about what NAIT can become. The purpose of setting out these beliefs is to provide a focus for discussion. While these thoughts will inform discussion, the direction for NAIT will be determined collectively.

So, what defines NAIT in 2021? NAIT has achieved its full potential by remaining true to what it is, and focuses on two defining characteristics or competitive advantages: relevance, and responsiveness. NAIT has become one of the world's leading polytechnics by becoming the most relevant postsecondary institution in Canada, and the most responsive to the emerging needs of Alberta.

Competitive Advantages – Relevance and Responsiveness

NAIT has built on its competitive advantages: *NAIT is relevant*, and *NAIT is responsive*. In fact, NAIT has become known as the most relevant and responsive postsecondary institution in Canada.

Our programs are relevant in that they meet the current and future needs of Alberta – our program focus is fully aligned with the future needs of our province. Further, NAIT focuses on, and is known internationally for, specific areas that align with Alberta's current and future wealth drivers. This includes entrepreneurship, and the energy sector. NAIT's educational philosophy is relevant. We educate our students for specific careers, with a skill or competency set that prepares them for their first job and provides a foundation for future leadership possibilities – what they learn is directly applicable to those careers. NAIT's teaching method ensures a relevant education. We fully integrate hands-on learning with theory. NAIT's research is clearly relevant. Our applied research addresses real world problems, as defined by industry.

And our relevance is understood by students and industry. It is more competitive to get into programs at NAIT than to any other polytechnic in Canada, and on graduation our students are in greater demand than those of any other postsecondary institution in Canada – they find meaningful employment at very good salaries.

Our second competitive advantage is responsiveness. We respond to a rapidly changing world. NAIT's ability to be responsive and adapt to Alberta's changing needs is great, which allows NAIT to meet the emerging needs of our province. We evaluate existing programs (suspending programs that no longer meet the current and emerging needs of Alberta and Canada) and introduce new programs. As industry evolves, what happens within our programs is evolving as well. Our people are responsive. Our staff members have a "just-do-it attitude" – rising to the challenges of a changing world. We are also responsive to our province's applied research needs, focusing on the areas that will provide the greatest impact to Alberta. We have developed solutions that will allow Alberta industry to be internationally competitive, and that build Alberta's environmental record.

Alberta Context

In transforming NAIT we focused on our Alberta context. NAIT exists to serve Alberta, and its people – to meet the current and emerging needs of this province. NAIT belongs to the province and people of Alberta. Every decision we make has been informed by this simple fact. But we also recognized that Alberta needed NAIT to be one of the world’s leading polytechnic institutions. We believed that this could be achieved within the structure of Campus Alberta – we worked with the government of Alberta to strengthen this structure.

A Polytechnic

NAIT has remained absolutely true to its past – it has remained a polytechnic, and has built on this foundation. It continues to have the same four programmatic pillars: science and technology, health care, the trades, and business. It continues to provide hands-on and pragmatic education that is employer-driven based in technology, and continues to focus on applied research with industry to solve real world problems.

While remaining absolutely true to these foundations, NAIT has been transformed into one of the world’s leading polytechnics. NAIT enables Alberta’s industry to be internationally competitive.

Programs at NAIT

NAIT as a Leader in Polytechnic Programs

Our programs are relevant in that they meet the current and future needs of Alberta – this program focus is fully aligned with the future needs of our province. NAIT is known across Canada for its four programmatic pillars.

Through continuous improvement, our programs are individually and collectively recognized as the best polytechnic programs in Canada. Three primary determinants define our program mix: our programs are consistent with a polytechnic (our four pillars); the programs meet specific needs in Alberta; and NAIT is best able to provide the programs.

Further, we work directly with business, industry, and other employers in defining our curricula to ensure our graduates have a foundation that will allow them to have a meaningful career.

On graduation, our students take best practice into industry as our program content leads rather than lags best practice.

We are leaders in adopting technology into the classroom.

Our Four Program Pillars

We are recognized provincially and nationally in each of our programmatic pillars: science and technology, health care, the trades, and business. In addition, in each pillar we have developed areas with international reputation.

In trades we play a leadership role in Canada, including the positioning of trades, and are internationally recognized as leaders in the development of curriculum.

Role of Advanced Degrees

Consistent with other leading polytechnics, NAIT provides advanced degrees. Each follows directly from our core competencies, and is wholly consistent with a polytechnic education. These degrees are applied non-thesis basis degrees, including our Masters in Project Management.

NAIT as a Thought Leader in Applied Research

We are an acknowledged leader in Canada and the world in applied research. The focus of this research is on assisting Alberta industry and companies to become globally competitive. This is, and will continue to be, our research focus. We are known across Canada for providing real solutions to real problems. From this success NAIT has more research Chairs and fellowships, and greater research funding, than any other polytechnic in Canada.

novaNAIT, which includes the Duncan McNeill Centre for Innovation, serves as a focal point for applied research at NAIT. Related to this applied research agenda, the Centre focuses on assisting entrepreneurs, business incubation, and start-ups. NAIT is one of Canada's drivers of commercialization, and plays a central role in assisting industry in technology innovation and adoption.

Areas of Strength

Entrepreneurship & New Venture

Entrepreneurship is central to all we do. All students have the opportunity to take courses in entrepreneurship, including small business and new venture. A larger proportion of our graduates start and run businesses than any other postsecondary institution in Canada. We provide a high level of entrepreneurship support for students, faculty, and the greater community. We play a fundamental role in Alberta's new venture and commercialization success.

Oil and Gas

A significant number of our programs and applied research initiatives support the energy sector, with a focus on oil and gas and alternative energy sources. We are among the best in the world in several programs related to oil and gas. NAIT scientists, engineers, and business faculty are

world leaders in aspects of the oil sands (these include conservation of water and tailings management), and have developed leading practices to restore abandoned oil and gas wells with a focus on land reclamation.

Our Campus

To meet Alberta's needs for polytechnic education we have grown significantly in the last decade – by well over 50%. Almost half of these new students are in programs that did not exist 10 years ago.

Almost all programs delivered in Edmonton have now been brought together at our main campus. The completion of the LRT had a major impact on students providing far greater convenience and allowing greater integration of programs with MacEwan University and the University of Alberta.

Our community was transformed with the development of the Airport Lands. The additional space was instrumental in facilitating the growth of NAIT and allowing the consolidation of campuses, as well as providing space for the new student commons. Our student commons is the most student-centered space in Canada including student housing, a child care facility, and new athletic facilities, all integrated into a community setting.

The Centre for Applied Technologies (CAT), when completed several years ago, had a transformative effect on the campus.

People

NAIT is recognized not just as an outstanding polytechnic, but as one of Canada's outstanding places to work. We made promises to our staff. These include having a culture based on inclusion and engagement, delegation, and empowerment. We celebrate! We celebrate individual and collective achievement, and we celebrate just to celebrate.

We are regularly ranked as one of Canada's leading places to work.

Collaboration

We have developed deep relationships with other polytechnics. We are working closely with SAIT, with Polytechnics Canada, and with other polytechnics worldwide (through PIN and bilateral relationships).

Reputation

In Canada and internationally, those who are knowledgeable about polytechnic education know NAIT and consider it to be among the leading institutes of its kind in the world. In Alberta, there

is a deep understanding of what NAIT is, and recognition that it is a leading postsecondary institution (e.g., neither above nor below other leading institutions including the University of Alberta, but serving a very different and essential purpose).

Financial

NAIT is a recognized leader in its financial practices in postsecondary education. We align our scarce resources to our vision.