



Research Strategic Directions

The Research Legacy at BCIT. Research has existed as a formal activity at BCIT since 1989 when the Technology Centre was created to facilitate research and development and BCIT continues to foster innovation and conduct applied research today.

Preamble: This document sets out a series of principles through which research will aid BCIT in meeting the goals and actions outlined in the BCIT Strategic Plan 2009 – 2014. This document acknowledges both the role that research can play in helping BCIT meet its strategic objectives as well as the financial realities of developing a research program at BCIT.

Together with BCIT's Strategic Vision, previous research reviews and other resources, this document is intended to support the evolution of a research strategy and supporting policies.

A. Research in the Context of the BCIT Strategic Plan

BCIT's Strategic Plan addresses research at BCIT. The following are specific references to the role of research in the Strategic Plan:

Vision: ...integral to the economic, social & environmental prosperity of BC

"...we need to advance the states-of-practice within the broad sectors we serve; to integrate applied research into our curriculum and conduct research that makes a tangible contribution to our society."

"BCIT conducts applied research to enhance the learner experience and advance the state-of-practice."

"BCIT strives to be at the forefront of changing technology and the state-of-practice relevant to the success and competitiveness of the employer community. BCIT also supports employer success and economic development by focusing applied research activities in areas that engage faculty and students to solve business and industry problems to increase competitive strength."

"Objective 8. Research/Advancing the State-of-Practice. Remain at the forefront of technological change and the state-of-practice through our programming and applied research."

Strategic Directional Statement 1. BCIT research will be guided by the Institute's Strategic Plan (and subsequent Implementation Plan), i.e. relevant to curriculum, students & the learner experience, tangible, focused on problem solving for business & industry and relevant to employer success.

B. Environmental & Planning Context for the Next 5 Years

Research at BCIT is, compared to traditional research universities, still in a formative stage. Like other evolving research institutions, BCIT faces significant barriers in terms of funding sources, infrastructure, policies, research expertise and commonly accepted research culture or tradition. *BCIT cannot rely solely on research strategies adopted by the traditional research institutions. Further, BCIT will have its own unique research aspirations consistent with its strategic vision. BCIT's research strategies may therefore be more opportunistic, flexible and evolutionary.*

Currently BCIT allocates about 2% of its budget to research. There is considerable financial uncertainty and many traditional sources of research funding are not readily available to BCIT due to internal & external factors. BCIT's research strategy will recognize these financial realities and the resulting hard choices.

Accountability will be expected in all aspects of post-secondary spending. A key BCIT strategic initiative is the stewardship of its resources and the establishment of quantifiable goals and accountabilities. A research strategy must address benchmarks, Key Performance Indicators *and other suitable standards to gage research 'success'.*

Strategic Directional Statement 2. BCIT will adopt research strategies appropriate for an 'evolving research institution'. Financial realities will be faced directly. Clear measures for research success will be determined.

C. Strategies for 'Evolving' Research Institutions ⁽¹⁾

Strategic initiatives for evolving research institutions will address entry barriers, suitable goals & objectives and good practice.

Typical 'barriers *to entry*' for primarily teaching institutions developing a research capability & strategy include:

- Limited funding for research and limited access to many or most traditional research funding avenues
- No defined research-related policies for HR, financial, resource allocation and other areas
- Need to 'catch-up' (vis-a-vis traditional research institutions) in terms of research infrastructure & facilities, research faculty & staff, and administrative & management
- Absence of suitable benchmarks, KPI's and other standards to measure research success

Goals & objectives suited for an evolving strategy include:

Growth

- Increase faculty & students engaged in research
- Expand areas of research activity
- Engage in research partnerships & collaborations

Organizational

- Increase research funding
- Allocate limited resources strategically
- Align research with institutional mission & mandate

Good Practices for evolving institutions include:

- Develop suitable funding/investment models
- Establish appropriate management & organizational structure, eg. Central research office
- Apply performance indicators
- Limit research priorities strategically (competitiveness, funding, niche)
- Cluster research activity (economies of scale)
- Align funding, HR recruitment, etc to research priorities
- Identify & establish suitable strategic alliances
- Ensure endorsement of research strategy at executive & board levels
- Broaden research to incorporate 'culture of scholarship'

BCIT has made progress in some areas especially in terms of research infrastructure (through ARLO) and establishment of benchmarks. However, specific initiatives will be required to identify and overcome the unique challenges faced by evolving institutions.

Strategic Directional Statement 3. BCIT will develop specific initiatives to address: identifying & overcoming barriers to entry, identifying research goals suitable for an evolving institution, and building upon good practice, both internally and elsewhere.

⁽¹⁾ *University Research Management, Developing Research in New Institutions, Hazelton, OECD Publishing 2005*

D. Recommendations and Issues from Previous Research Reviews

From 2008 Task Group

1. Strong linkage between research and education. (*Addressed in BCIT Strategic Vision and recognized in Strategic Directional Statement 1*)
2. Annual operational planning process within each School.
3. Collaboration or interdisciplinary research activities.
4. Each School mandated to conduct research.
5. Research funding (a) seed funding, (b) on-going funding.
6. Better integration of Technology Centre and Schools. (*Addressed partly by inclusion of Research under VP Education portfolio*)
7. Collective agreement issues related to research.
8. Increase external funding for research. Recognition that traditional sources such as NSERC are not always viable for BCIT's particular situation. (*Recognized in Strategic Directional Statement 2*)
9. Need to establish research performance measures. (*Acknowledged in Strategic Directional Statements 1 & 2*)
10. Need for research policy and strategy.
11. Establish on-going research task group. (*Research Task Group now in place*)

From FSA Forum

1. Research and education need to be in balance in terms of how they contribute to BCIT's mandate. *(Acknowledged in BCIT Strategic Vision)*
2. To optimize the contribution of research to meeting our organizational objectives, internal structures need to be reviewed and adapted to encourage internal collaboration Business, funding, and resourcing strategy. *(Encapsulated in Strategic Directional Statements 3 & 4)*
3. Instructional workloads create significant challenges to involvement with research and realizing the benefits of research in the classroom. *(Acknowledged in BCIT Strategic Vision and encapsulated in Strategic Directional Statement 1)*
4. Collective decisions need to be made about BCIT's financial support for research. *(Encapsulated in Strategic Directional Statement 2)*

Key issues have been identified in previous research reviews. Some progress has been made and the BCIT Strategic Vision has set the broad context for the role of research at BCIT. *However, specific initiatives will be required to evaluate and address detailed issues raised in previous reviews.*

Strategic Directional Statement 4. BCIT will consider the findings of previous reviews and develop specific initiatives to address issues including:
(a) strengthening links between research & education
(b) Collective Agreement & workload issues
(c) improvement of collaborative research across the Institute
(d) clear financial models
(e) lobbying & advocacy
(f) building upon & enhancing existing infrastructure and processes, etc.