

## **Reflections on BCIT's Vision**

BCIT Faculty and Staff Association, April 29, 2008

This discussion paper is an attempt to capture the essence of BCIT's Strategic Vision. It is a by-product of work conducted by the FSA Institute Vision Analysis Committee (IVAC) on behalf of the FSA Executive. The work included a review of various reference documents (see attached list) and various discussions among FSA members and its Executive. An attempt is made to identify the strengths, emphases and priorities of the vision. We anticipate that this document will become part of the dialogue now taking place at BCIT with regard to the Institute's vision.

BCIT's vision has been dubbed a "polytechnic" vision in the past. Here, we have chosen instead to focus on the vision itself, and leave aside the question of whether this is, in whole or in part, well described as a "polytechnic" vision.

We use the term "distinctive" in favour of "unique", as uniqueness is not a prerequisite for success. For example, few if any programs at BCIT are unique to BCIT, nor is it necessary, or even desirable, for this to be the case in order for BCIT to flourish.

In order to be suitable as a vision statement for BCIT, the vision must be largely descriptive of most of the programs and activities at the Institute. However, the vision is not intended to be a complete and comprehensive description of present or future activities at the Institute. Individually justified exceptions are expected.

The contribution of the members of the FSA Institute Vision Analysis Committee (IVAC) is gratefully acknowledged by the FSA Executive.

## **Underlying Purpose: *Service to the needs of Students and Industry***

An emphasis on linkages with industry, and a focus on jobs for graduates, is a consistent and dominant theme in all documents. In short, the main underlying purpose of BCIT is to serve the needs of students to gain meaningful employment in Industry and to thereby support the commercial, economic and social development of the Province of BC. For purposes of discussion, Industry refers to all aspects of economic activity in the province including, but not limited to, business, manufacturing, health care, IT and government services.

Activities at BCIT to address this underlying purpose comprise:

1. ***Preparation of students for industry positions leading to rewarding careers.*** The distinctive emphasis is a more direct connection between the programs and the needs of industry than either universities or colleges. The employability and success of graduates is a key quality indicator. Graduates should be seen by Industry to be particularly productive as compared with counterparts from similar programs at other institutions. They should also be particularly successful in advancing to more senior positions within their chosen occupation.
2. ***Educational Programs constructed and optimized for alignment with the needs of Industry.*** The distinctive aspects of this point are described in the “Experiential Education and Program Focus” theme.
3. ***Broad coverage of Industry needs:*** The distinctive aspects of this point are described under the “Breadth” theme.
4. ***Applied research and expert services for industries that we serve with our educational programs.*** The distinctive aspects of this point are described under the Applied Research theme.

## Theme 1: Experiential Education with Program Focus

Within the vision, the singular dominant focus at BCIT is its educational programs, i.e., it is focussed primarily on delivering post-secondary educational programs that are recognized by industry, and associated licensing and accreditation bodies, as approved efficient paths to careers in industry. This primary focus leads to a distinctive, and very much applied, institutional structure.

1. ***Faculty dedicated to undergraduate teaching:*** Most faculty are primarily dedicated to teaching. Relevant industry experience among faculty is essential, in keeping with the alignment of programs with the needs of Industry.
2. ***Demanding programs:*** The intensity of the programs at BCIT is the main means of ensuring that graduates meet a high standard. Programs are characterized by high numbers of contact hours with primary instructors, and significant time and effort expected of students outside of classes. The programs are also characterized by having low student-to-teacher ratios.
3. ***Stimulating learning environment:*** This is achieved through the dedication to excellence in undergraduate teaching and the applied educational models adopted in the programs.
4. ***Well equipped laboratories for programs that put an emphasis on laboratory skills:*** The provisioning of laboratories, and the Institute in general, is driven largely by program needs, and not research needs.
5. ***Specialized support courses:*** Math, science, communication, liberal studies and other complementary studies courses are provided in support of the educational programs: A distinctive property of these courses is that they tend to be presented with specific reference to relevant applications and subject matter within the programs that they serve. For example, it is typical within an institute such as BCIT that multiple first-year math courses are offered, each tailored to the needs of the program that it serves.
6. ***Experiential Education:*** Historically, the pedagogy of programs at BCIT, and similar educational institutions, has included a “hands on” or experiential approach that is accomplished through laboratory instruction as well as a variety of other experiential learning modalities. These other modalities include workplace education, apprenticeships, internships, practicums, cooperative education, field placements, industry sponsored projects, and independent studies with industry.
7. ***Contextual Learning*** The experiential learning modalities are combined with application-first program structures, where practical applications are presented before, or in tandem with, the underlying theory so that the theory can be learned in context. The applications are subsequently revisited and explored in greater depth given the benefit of the newly introduced theory. This contextual approach is in contrast to a traditional academic model, where theory tends to be developed before applications.
8. ***Effective Delivery Models and Program Structures:*** In addition to full-time on-site programs, various other models need to be emphasized, such as part-time studies, distance education and the various modalities of experiential education. Many BCIT programs retain a

cohort structure, where students advance through the program in groups, or sets. This has long been a distinctive and valuable attribute of BCIT programs. By moving through the program as a cohort, rather than registering for courses individually, students get the benefit of a supportive and collegial educational environment, and an intensive team experience. Course-by-course registration can be usefully adopted in other circumstances to provide students with flexibility in the pace with which they complete the program, and to work efficiently with periods of workplace education. Part-time studies and on-line distance education offerings provide for the effective delivery of diploma and degree courses in a manner that is accessible for mid-career professionals and working people seeking to make a career change. The model used by each program is driven by needs of students enrolled in the program and efficiency of interface with Industry.

9. ***Laddering and life-long learning:*** As students advance through the system, intra-program and inter-program laddering allows them to gain due credit where possible for various courses and programs that they have completed. People can then interweave periods of relevant employment as they advance their education. This is a means of addressing the need for professional development and life-long learning among working people.

## Theme 2: Breadth

Within the vision, BCIT is distinctive in its breadth of coverage of trades and technology: it provides a broad range of post-secondary trades and technology programs in a form that is accessible to a broad cross-section of students.

1. ***Broad Program coverage:*** BCIT should be known by prospective students to have a broad selection of program offerings, and also known by employers to be a good source of a wide range of prospective employees. Broad coverage of all of the following areas is needed:
  - a. *Trades, vocational and technical training:* Breadth of coverage of trades and vocational training is a distinctive attribute of BCIT as compared with universities, colleges or specialized trade schools.
  - b. *Technology programs:* BCIT has long been distinctive in its breadth of selection of industry-relevant educational programs leading to certificates and diplomas. The programs relate to the development of expertise in the use of technology for business and Industry.
  - c. *Applied degrees:* Granting of applied degrees up to a master's level is specified in the College and Institute Act. The word "applied" is significant here, in keeping with the emphasis on the needs of Industry. Applied degrees at BCIT should be designed and accredited at as high a "level" as university-based degrees. This is important for meeting Industry needs, as Industry has established norms for job expectations and salary scales related to various types of credentials: Graduates from programs that do not fit within these norms will suffer when it comes to getting a job. This is also important for credential recognition for entry to graduate studies at other educational institutions.
2. ***Options for a broad range of students:*** Breadth implies a broader catchment of students than other institutions. Students have widely varying prior education, cultural backgrounds and motivations. For degree programs, entrance requirements will often be lower than comparable university-based programs in order to provide educational opportunities for individuals who for whatever reason have not yet demonstrated their academic potential.

## Theme 3: Applied Research

BCIT is well positioned to make important contributions in applied research. This is distinct from, and complementary to, the pure research that is the traditional domain of universities. The applied research at BCIT should be more focussed on functional outcomes; advancing best practice and product commercialization, solving problems and enhancing competitiveness for business and industry, while creating opportunities for students to apply their skills in real-life scenarios under the mentorship of faculty and industry sponsors. Within the vision, applied research at BCIT comprises:

1. ***Activities in support of the Institute's educational programs.*** Applied research at BCIT should be undertaken largely in service of the needs of the educational programs. For example, analyses of best practices in various industrial contexts can be brought back to the classroom to the benefit of students and faculty. Industry-sponsored projects within programs can usefully include applied research components. Students and faculty benefit by having the opportunity to be involved in applied research. Industry benefits from collaboration on the resolution of relevant problems, access to expertise, and the transfer of knowledge and technology.
2. ***Activities to derive commercial, economic and social benefit from research:*** Success in applied research within BCIT should be measured, at least in part, by being a good source of support for prototyping, commercialization, product design, product development, testing, verification, marketing, business analysis, standardization and other areas that help derive commercial, economic and social benefit from research.
3. ***Expert services to industries associated with the Institute's educational programs:*** Expert services enable Faculty and Staff to maintain currency and establish leadership within their chosen Industries. They highlight BCIT's strengths in supporting the needs of Industry, and contribute to educational programs by being a source of student projects and by ensuring program currency. Such services need to be provided in a way which encourages cooperation rather than competition with Industry.

## References

1. Web Sources
  - Wikipedia definition of polytechnic
  - "Origins of the Polytechnic", [www.csupomona.edu/~plin/lis201/polytechnic2.html](http://www.csupomona.edu/~plin/lis201/polytechnic2.html)
2. BC College and Institute Act
3. 2000 Polytechnic Advisory Council, including
  - "Summary documents relating to the Polytechnic Advisory Council (2000)"
  - "BCIT – a Unique Polytechnic Institution"
4. 2008 FSA Polytechnic Vision Committee
  - "Polytechnic Points of View"
5. BCIT Descriptions, including:
  - BCIT at a Glance
  - BCIT Service Plan
6. Documents and descriptions from Polytechnics Canada, including:
  - Polytechnic Advantage
  - Sharpening Canada's Competitive Edge
  - Polytechnics Role in Canada

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