Competency-Based Assessments

Understanding the Use of Competency-Based Assessments in Admissions Processes

by Jennifer DeDominicis and Bonne Zabolotney September 2020



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BC COUNCIL ON ADMISSIONS & TRANSFER
Web/Email: bccat.ca | bctransferguide.ca | info@bccat.ca
Twitter: @bccat_org | @bctransferguide

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Executive Summary

With a shifting K-12 curricula and new forms of assessment for high school students in British Columbia, this project seeks to understand how post-secondary institutions in BC and elsewhere are working with competency-based credentials and assessments in their admission processes.

At the outset of the project, our objectives were:

- To review current and emerging trends and approaches to competency-based assessment in admissions in BC and elsewhere;
- To articulate admissions practices and activities related to competency-based credentials and assessments, and to identify potentially scalable and transferable practices for consideration;
- To explore the extent that competency-based credentials are used in admissions processes at BC Transfer System member institutions¹;
- To identify guidelines or tools that might assist institutions in admitting students into competitive programs, and to determine how these align with national and international practices; and
- To suggest appropriate next steps, including topics for further research.

The BC post-secondary admissions community expressed an interest in how competency-based admission processes currently used for specialized programs, with relatively competitive and small intakes, might be applied more broadly across a range of programs, perhaps even to those with open admission.

The questions that have guided our research are:

- How are post-secondary institutions in BC and elsewhere responding to or evaluating incoming competency-based assessments/credentials for admissions? How do they benchmark these types of assessments against more traditional academic transcripts?
- How are post-secondary institutions implementing their own competency-based evaluations as part of admissions processes? How might these practices be broadly applied and shared throughout the post-secondary system?
- · How are post-secondary institutions using competency-based assessments for admission to competitive programs?

¹ This research included participants from the British Columbia public post-secondary system, as well as one BC private post- secondary institution and public post-secondary institutions elsewhere in Canada and in the US.

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Our research also revealed implications and opportunities for BC post-secondary institutions which can inform next and best admissions practices and policies.



Throughout the research process, we identified common gaps in admission practices and processes. Our research also revealed implications and opportunities for BC post-secondary institutions which can inform next and best admissions practices and policies. Some of the gaps we've noted include:

- confusion over or miscommunication of what "competency-based admissions processes" means;
- whether admissions processes are aligned to institutional goals; and
- an inconsistent allocation and availability of institutional resources throughout the post-secondary system, including financial resources, enterprise and software supplies, time, and labour.

Our findings have led us to make five recommendations for post-secondary institutions to consider for competency-based admissions practices:

- 1. Align admissions practices to institutional purpose and context;
- 2. Make systems, structures, and resources transparent to everyone;
- 3. Create consistent interpretation and reliability in readers;
- 4. Create processes that amplify learning instead of replicating transactional pass/fail binaries; and
- 5. Build bridges, not gates, for greater accessibility.

Core Knowledge and Context: Discernment vs. Diversification

Undergraduate and graduate-level programs, ranging from engineering and visual/performing arts to business and health disciplines, have developed a range of admission processes and practices to consider competency-based assessments. While these assessments seek to determine student readiness to undertake a post-secondary academic program, what has prompted a shift towards broader admissions criteria? And what are the standards used to measure and evaluate these criteria?

The turn towards competency-based admission practices is a response to several contemporary issues affecting post-secondary institutions. The first shift, across Canadian and US universities, colleges and institutes, is an increasingly diverse student demographic. In Canada, "the proportion of persons belonging to a visible minority group quadrupled between 1981 and 2011, from

The turn towards competency-based admission practices is a response to several contemporary issues affecting post-secondary institutions. The first shift, across Canadian and US universities, colleges and institutes, is an increasingly diverse student demographic.

4.7% to 19.1%", with an anticipated rise to 30.6% by 2031 (StatsCan, 2016, p. 40). As well, the growth rate of Indigenous Canadians is four times that of the non-Indigenous population, with the number of Canadians of Aboriginal identity projected to reach between 1.7 million and 2.2 million by 2031. Canadians of Aboriginal identity comprise between 4.0% and 5.3% of the Canadian population (StatsCan, 2016).

This increased student diversity has been addressed by Canadian post-secondary institutions through inclusive and equitable practices in hiring faculty, admitting students, and reworking curriculum to respond to decolonization, indigenization, and global issues facing learning communities. Equity, diversity, and inclusivity have become strategic goals for universities, colleges, and institutes across Canada, and are included in a major statement of commitment on Universities Canada's website². Competency-based admission practices respond to this commitment by broadening opportunities for students, through providing different ways for them to demonstrate their ability to learn and thrive in specific programs.

William Sedlacek has promoted the consideration of what he terms "non-cognitive variables" related to adjustment, motivation, and student perceptions, over verbal and quantitative variables (typically referred to as "cognitive") for students from underrepresented populations. Grades and exam results may not fully describe their potential (Sedlacek, 2005). He advocates using non-cognitive variables as a way to "expand the potential we can derive from assessment" and identify talent (Sedlacek, 2011, p.182). He does not seek to eliminate tests and grades, but proposes that we are able to be more expansive in the t dimensions we consider by adding these measures (Jaschik, 2017).

American institutions cite competency-based or holistic admission practices as a more equitable assessment process for prospective students who may otherwise be socially, financially, and/or racially under-represented in higher education. This is distinctly different from the Canadian practices we have observed, which use competency-based admission practices to differentiate between similar applicants applying to competitive programs with limited numbers of seats. The adoption of competency-based criteria in admissions can be a response to issues of access to limited spaces with high demand, as opposed to using admission practices to build diversity in the student population. Furthermore, Canadian institutions are conscious of maintaining performance outcomes, specifically institutional graduation rates, and use competency-based practices to admit students with the greatest potential of success in their program of choice.

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² Universities Canada is an organization that provides advocacy for and unified representation of universities across Canada. Its definition of, and commitment to, equity, diversity, and inclusion is at https://www.univcan.ca/media-room/media-releases/universities-canada-principles-equity-diversity-inclusion

By expanding the scope of what is considered as the basis for admission, schools are able to re-assert their activity in locating the students they desire. As Andrew Arida (2014) states, "[I]f a university's admission requirements shape how the institution is perceived by its environment, then it is critical for the organization to show itself as an active actor in its ability to negotiate resources from its environment" (p. 163). In relying exclusively on academic merit for decision making, Arida argues, the university is rendered "a passive actor in the selection process" (p. 163). Grading relies on external assessment by secondary school teachers, locating control of that assessment beyond the college or university (Arida, 2014).

This emphasis on the institution as actor helps us to distinguish between holistic and competency-based admission criteria. Holistic criteria consider a student's academic and personal contexts. Constructs of merit are not confined to a singular measure, or determined without consideration of the intersectionality of the "barriers, advantages, and experiences in each applicant's life journey" (Coleman & Keith, 2018, p. 6). Canadian institutions do not necessarily collect or have access to demographic and contextual data such as the US Landscape™ data system, distributed by the College Board. Landscape™ data include high school and neighborhood statistics, relative to overall state performance statistics. Other statistics may include an area's average income, school lunch programs, crime, and household structure. These types of data may be taken into account by admissions offices as part of a holistic evaluation of student applications.

The second shift in competency-based admission practices is the alignment of admissions competencies with curriculum competencies. This development is often most visible within health sciences and business programs, and in programs where graduates must meet standards and competencies articulated by a regulated professional accreditation body. For example, in undergraduate nursing programs already using competency-based criteria in admissions, the importance of ethical judgment, critical thinking and communications are reflected in required courses such as "Context of Nursing and Health Care" and "Health Ethics" in BCIT's Bachelor of Science in Nursing program.

Sedlacek underscores the importance of understanding that students do not "come to higher education fully developed" (2017, p. 415) but that they improve through experience at an institution. Building an admissions process that complements or parallels the structure of competency-based learning means that institutions will set clear expectations that students express themselves according to the institution's culture. Schools specializing in or supporting art, design, and performance programs are particularly adept at building admissions expectations that reflect program culture, since these disciplines already excel in the practice of critique and feedback loops.

Aspirationally, critiques employ objective, flexible, comprehensive, constructive, and authentic feedback. As a part of the learning process, critiques are iterative, and are utilized to refine ideas and projects. Structuring admissions processes as an opportunity to critique applicants' work, for acceptance or future refinement, is a natural practice in art, performing arts, design, and media programs. This process presents a model for other programs to adapt or adopt, ensuring that "admission standards [are] designed in accordance with the content of the institution's own courses" (McQuarrie, 2016, p.12).

Finally, it is imperative to adequately prepare for students graduating from BC secondary schools with results from the numeracy and literacy assessments that are part of the new BC Grade 10-12 assessment framework⁴. BC post-secondary institutions are mobilizing to understand how the exit points of BC high school students align with the entry points to various programs. The learning requirements of the new curriculum are:

- literacy and numeracy foundations: text literacy, numerical and financial literacy, visual literacy, and digital literacy);
- essential learning: a deeper understanding of concepts as opposed to the memorization of facts; and
- core competencies: creative thinking, critical thinking, communication, positive personal/cultural identity, personal awareness and responsibility, and social awareness and responsibility.

³ More information about the College Board's Landscape™ data can be found at https://pages.collegeboard.org/landscape

⁴ More information about B.C.'s new K–12 assessment system can be found at https://curriculum.gov.bc.ca/assessment

Ideally, these exit competencies and attributes will meet the institution's expectations of a post-secondary student's skills at the time of admission. This leaves "post-secondary institutions [to] determine how demonstrations of students' skills or knowledge in these formats relate to the skills or knowledge considered necessary for admission and for maximizing students' opportunities for success" (McQuarrie, 2017, p. 12). The challenge is for BC post-secondary institutions to not only prepare for this shift, but to leverage this transformation to cultivate change in policies, practices, and procedures. This research addresses a need for more resilient and purposeful processes to respond to an ever-changing admissions landscape.

Research Design

This project adopted a primarily qualitative design, including interviews and literature review, appreciative inquiry, participatory research methods, and reflective practices. We identified current scholarship and research, systems, processes, and practices, and administered a survey to BC registrars and designated admission leaders in the autumn of 2019. Our interviews were conducted with Registrars, Deans and Directors of Admissions. Both interviews and surveys were designed to be participatory, including ongoing dialogue and feedback with participants.

Our approach maintained flexibility in exploring ideas and various levels of clarity and understanding, and considered the breadth of practices, vocabularies and contexts of the post-secondary institutions we examined, along with the range of programs they support through admission. The survey and interview design deliberately sought to mitigate contextual challenges such as resourcing and timing. Our approach supported generative dialogue, resulting in an understanding of the range and scope of complexity and contexts. It also allowed the data to be framed in various ways throughout the process of interpretation and analysis. The approach also valued participants' opinions based on knowledge, expertise, experience, and institutional memory.

For the purposes of this project, we described competency-based assessment as a framework to collect evidence of competence, in order to evaluate applicants holistically. Competency-based assessment is therefore non-traditional in comparison to admissions processes that rely solely on required subject-area grades or demonstration of learning through other academic benchmarks or criteria (e.g. test scores from TOEFL, IELTS, ACT, MCAT, or GRE).

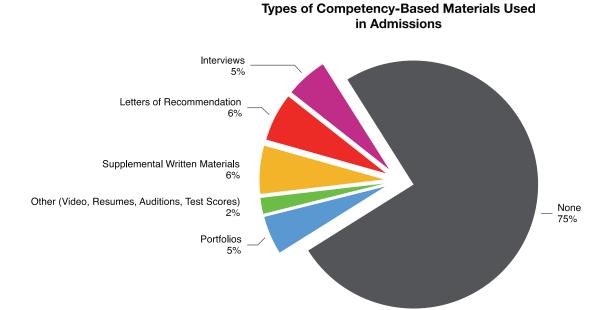
Survey Findings

We distributed the link to our online survey to 26 BC post-secondary institutions; 65% of these responded. These included eight colleges, seven universities, and two institutes.

Over 80% of participants indicated that competency-based evaluation criteria were being used at their institution, in addition to academic requirements, for admission to undergraduate, diploma, and/or certificate programs. However, of these 80%, only 25% of their programs use competency-based criteria in admissions (**Figure 1**). The admission criteria for graduate and post-graduate programs were largely unavailable from the participants we surveyed. Either the admissions process at this level of study was dispersed and faculty-driven, or the participant's institution did not offer that level of study. Only three participants reported that all or a significant number of programs at their institution use competency-based evaluations for admission.

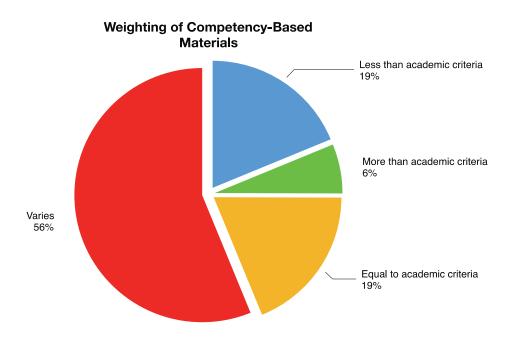
When asked which types of competency-based materials were required for applications, in addition to academic transcripts, survey participants most often cited letters of recommendation and supplemental written materials such as personal profiles, essays, or questionnaires, followed by interviews, portfolios and "other". "Other" included videos, resumes, auditions, and test scores.

Figure 1: Types of Competency-Based Materials Used in Admissions (n=17)



The relative weighting of competency-based materials in admissions decisions varied, with only 6.3% reporting these were weighted more significantly than academic criteria. Competency-based materials were more typically weighted less than (18.8%) or equal to (18.8%) academic criteria (**Figure 2**).

Figure 2: Weighting of Competency-Based Materials (n=17)



One in four respondents reported that their institution used externally-supplied selection tools or technologies for competency-based application materials. The tools and technologies identified by respondents included:

- Technolutions Slate, a software product for admissions and advancement;
- CASPer® (a selection tool for non-academic attributes/people skills); and
- SlideRoom (a system to accept and review applications including materials such as portfolios and letters of reference).

Nearly one-third (31.3%) of respondents reported developing internal applications and resources, including customizations, additional staffing, and program-level evaluation systems, that were tailored to their institution's needs.

Fewer than one-third of the respondents felt that that the competency-based evaluations at the program level at their institution represented best practices.

Interview Findings

For the second phase of our research, we conducted 30-minute interviews with admissions leaders from 16 post-secondary institutions and with two consultants who self-identified as organizations with experience in competency-based admissions practices. There were nine interviewees from within the BC system, one from an American university, and five from post-secondary institutions in other parts of Canada. During these conversations, we contextualized the research, and asked participants to describe their admissions practices related to competency-based criteria. Our interviewees included survey participants who had identified their institution as having an example of best practice for competency-based criteria for admission. We selected interviewees to be representative of different types of institutions and locations. All of the admissions professionals we spoke with represented the centralized "hub" of admissions, and were not faculty or program-based admissions staff.

We also spoke with a consultant from AACRAO (American Association of Collegiate Registrars and Admissions Officers) who has extensive experience supporting the implementation of holistic and broad-based admissions processes in the US and Canada. As demonstrated by the presentation slides in Appendix C, AACRAO has clearly defined holistic and broad-based admissions, linking it closely to eight non-cognitive variables, while demonstrating the advantages of non-academic admissions processes, and its influence other institutional departments and functions. Additionally, we spoke with representatives from Kira Talent, who describe their company's product as the only holistic admissions software solution for higher education.

Key Themes in the Data

Emergence and Overlap

From the survey design and initial conversations with participants, we understood that the language of competency-based assessment in the context of admissions is complex, and that a singular understanding is emerging amongst the admissions professionals we spoke with. Typically, we began conversations with background information about the project, and then asked questions around examples of frequently deployed competency-based admissions criteria, such as portfolios/auditions, interviews, or tests like CASPer®. These examples were intended to prompt more specific examples from the interviewees. Our interview questions addressed non-traditional application materials, examples of current competency-based criteria and assessments, and questions for BC participants about their preparations for the new BC Grade 10-12 assessment framework. We understood we were traversing a range of admissions strategies and a lack of consistent vocabulary in reference to "non-traditional," "holistic," "broad-based" and "competitive" admissions.

Overall, we found an inconsistency in the use of the term "competency". In our interviews, and through our literature review, we identified a miscommunication of what this term means, and confusion over whether "competencies" referred to subject-related knowledge and skills, general academic competencies and literacies, or personal competencies and personal experiences. Throughout our research, we noted the use of various terms for non-academic admissions materials or processes. Post-secondary institutions have used "non-cognitive," "competency-based," "broad-based," and "holistic" to describe their practices of evaluating students on the basis of criteria beyond their academic transcripts. While these terms are related and share many attributes, they are somewhat distinct in their overall goals. Non-cognitive evaluations look at non-academic abilities; competency-based evaluations focus on necessary skills for success; holistic evaluations assess the whole person; and broad-based admissions practices focus on attracting well-rounded applicants. Despite the differences in goals and intentions, all four approaches look at the personal and social skills of each applicant, and then apply either the evidence of accomplished skill or the evidence of potential skills to the evaluation of the applicant. The criteria of interest and the weighting of the criteria vary from institution to institution, and even from program to program.

Figure 3 demonstrates the inter-relationships between these terms. The broad terms used in each admission strategy may be distinct in the goal to recruit students according to institutional objectives, but the characteristics of each strategy frequently overlap. At the centre of all strategies is a shared concern for students to possess personal and social competencies. In other words, the goals for each strategy may differ, but the criteria to achieve those goals have much in common.

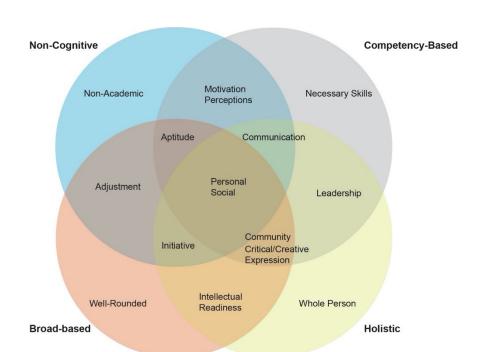


Figure 3: Overlapping Admission Strategies

It should be noted that representatives of several schools cited policies and even mandates for access and inclusivity. All of the representatives we spoke with have mechanisms at their schools to support individuals who may not present "traditional" academic transcripts, or mechanisms that seek to remove barriers for Indigenous or adult and mature learners. These mechanisms are frequently used to interpret application materials on a case-by-case basis, using resources such as databases, shared knowledge with colleagues at other schools, and research by admissions professionals. Some institutions' representatives cited processes similar or parallel to prior learning assessment and recognition (PLAR), including portfolio evaluations. Others cited the need for supplemental testing when materials or information were not available or could not be benchmarked against previous evaluations. In all cases, these interpretations were discrete and non-frequent, and not considered burdensome.

Additionally, many interview participants cited supplemental, special consideration, or appeal processes for applicants with extenuating circumstances. These were used to address instances when a student's ability to meet stated academic requirements was compromised as a result of their personal circumstances. This "special consideration" situation differs significantly from holistic admission frameworks that seek to understand the "whole student", including socio-economic and adverse circumstances, at the outset of evaluating a student's application. These factors create a distinction between holistic and even broad-based competency-based criteria that focus on attributes or competencies related to academic success. In all but a few cases, it was not always clear which frameworks the admissions professionals we spoke with were referencing or seeking to work within. Are these distinctions (and the purpose of the various frameworks being deployed) sufficiently clear within the vocabularies of admission professionals, as they seek to respond to multiple and often overlapping needs/goals?

Table 1 outlines the differences between holistic and competency-based admissions criteria. It is worth noting that holistic criteria are usually applied at the start of admission processes, whereas competency-based criteria are typically applied once applicants have passed academic screening. This difference alone points to a need for explicit strategies, processes, and institutional policies to reinforce and support admission goals.

Table 1: Holistic versus Competency Criteria and Practices

	Criteria	Assessments Related to Criteria	Practices	Attributes	Responding to:
Holistic	Academic and personal context	Transcripts or academic testing Where they have lived, how that shaped what they learned, life experiences	Aligned to institutional mission and/or strategic goal	Data driven Reduced need for resources	Diversity Inclusivity Access
Competency	Typically assessed after academic screening/ benchmark has been met	Assessment of traits and abilities (communication skills, judgement, problem solving, abilities related to the discipline)	Aligned to program need and student excellence	Qualitative Uses various assessment tools Resource intensive	"Fit": identifying students with greatest likelihood of success in program and/or field

Purpose

Interview participants frequently cited the importance of questioning the motivation of the programs or faculties wanting to change or broaden existing admission requirements. One participant said that they began by asking faculty members "what problem are you trying to solve?" Other participants described similar questions, frameworks, processes or policies to ensure, at the outset, that the purpose of the desired changes was consistent with and could be addressed through practice. Several interview participants mentioned that programs or faculties are expected to provide these justifications as part of program approvals by Senate or parallel academic governing bodies. One participant described a business process review that resulted in the removal of all admissions criteria beyond grades, with programs required to re-qualify in order to be able to introduce additional criteria.

Concerns about purpose were central because admissions professionals sought to effectively support program goals and ensure these fir with the institution's mandate and enrolment goals. Many participants described differing expectations of how admissions criteria should address student success in programs. For example, should an applicant be able to demonstrate particular acumen or skills such as "problem solving" or "effective communication"? Or is it the responsibility of the program, as part of its learning outcomes, to teach these during the student's enrollment, and for the student to demonstrate these competencies in order to be able to graduate? In many cases, it was unclear whether introducing additional admission criteria addressed the preparation required for learning in specific programs, or addressed the capacity of students to succeed. In other words, the criteria of interest may be conflated between entry-level and program-level learning outcomes.

Some interview participants indicated that programs sought to implement competency-based assessment criteria as a means to diversify the incoming cohort, so that factors beyond high grades were considered in making admissions decisions. Ideally, prospective students with different experiences could be considered and "have a shot" if the admission criteria included more than grades. The representatives of these schools were clear that their admissions practices and policies were aligned with the institutional mission or strategic plan, and that the shared goals of diversity, equity, and inclusivity spanned programs and levels of study.

Resources

Our interview participants described resources that were used in a variety of ways. The adoption of software for interviews (Kira), portfolio submissions (SlideRoom), interview testing and evaluation (CASPer®) and academic testing (Accuplacer) were mentioned alongside the necessary staff: faculty teams, admission staff teams, or a combination of both. Representatives of institutions that managed in-house competency assessments reported that their processes were resource-heavy and difficult to scale up. The representatives that reported streamlined processes were at institutions that typically relied on an external resource such as CASPer®, while managing the review of academic requirements in-house.

The institutions that use portfolios as a major admission requirement, such as Emily Carr University of Art + Design, depend on a large volume of faculty to review and adjudicate applications. Other schools with art, design, or performing arts programs have left the admission review process entirely to program heads and faculty, with the centralized admissions department recording outcomes and making offers of admission to students based on aggregate review results. In these cases, admissions department practices and faculty-led admissions practices work independently from each other.

Vacancies and turnover were identified as vulnerabilities affecting consistent practice and depth of knowledge. One interview participant spoke of the understanding by the bargaining unit and the relative classification level of admissions professionals as an impediment to retention, as the complexity of admissions work is not well understood. Further, the resources needed to deploy competency-based criteria can be significant for a smaller school. Operating competency-based admission processes can be time-consuming, and may undermine a program's competitive position. If the process for evaluating competency-based applications means that offers cannot be extended to prospective students as quickly as possible, the risk of not filling a program supersedes the adoption of competency-based criteria.

In most cases, there were variations in the weighting assigned to competency-based criteria and academic requirements. For visual and performing art/design programs, competency-based criteria were weighted more significantly in admissions decisions, as long as baseline academic requirements were met.

The dynamics between high-demand programs and non-competitive programs also require a distribution of resource. These include finances, time and labour, and emphasize the importance of explicit admission goals and strategies.

For larger institutions who receive high numbers of applications, significant resource demands are involved with admissions evaluations. The British Columbia Institute of Technology (BCIT), for example, experienced a substantial increase in applications when it participated in a common application process (ApplyBC). BCIT developed an admissions strategy to manage the large numbers of applications, taking student agency into account by allowing students to self-report grades, and also introducing a streamlined approach to student applications, as discussed in the "Next" and "Best" Practices section. A select number of competitive BCIT programs still require interviews, portfolios, and MMIs (multiple mini-interviews) to make final admissions decisions.

Consistent Practice

Most interviewees gave examples of rubrics being used to assess applicants' competencies, with some identifying this practice as a requirement for the program to receive approval through the academic governance processes. Some also mentioned that individual programs were required to keep rubric documents in case of appeal, and to be able to provide feedback or answer questions if required. Many of the centralized admissions professionals we spoke with had concerns about adherence and transparency to these rubrics, and skepticism about their consistent application. One stated, "They say they are using them."

Several interview participants described a selection process at their institution in which the central admissions hub would provide schools/programs/faculties with a list of applicants who had met the academic admissions criteria. Depending on the program's next steps and the demand for admission, the program staff would combine the central data with competency-based assessments to determine who should be offered a spot, to differentiate applicants to programs with highly competitive admissions, or to advance applicants to the next stage of the admissions process. The next stage would usually include competency-based assessment criteria such as interviews.

In most cases, there were variations in the weighting assigned to competency-based criteria and academic requirements. For visual and performing art/design programs, competency-based criteria were weighted more significantly in admission decisions, as long as baseline academic requirements were met. It should be noted that programs communicated their evaluations back to the admissions hub in different forms. In some cases, the programs provided a ranked list with no "scores" for central admissions to include as part of the applicant's admission record. In other cases, the evaluations would consist of a set of scores with accompanying documentation.

Some interviewees described a system in which multiple reviewers evaluated competency-based materials or methods, with at least two faculty and staff members assessing each applicant's submission. Many of our interview participants recognized the time that faculty and staff expended to engage in assessing admissions, and mentioned concerns with consistency and training for participating faculty, as well as knowledge transfer and succession planning. These considerations are especially crucial in boutique programs with one or two faculty who have participated in application reviews for many years, and then may retire or become unavailable to continue this important work. The assessments then become vulnerable to inconsistencies, and the introduction of potentially different subjective viewpoints from new individuals can expose the process to risk and unintended scrutiny. Few inter-

view participants mentioned common training for faculty or staff engaged in competency-based assessments, other than central admissions staff. One interview participant stated that the opportunity to introduce this process occurred with the implementation of a new program, with external consultants who developed and delivered training to faculty and staff reviewers. Another described how their institution's flexible admissions committee pairs new readers with experienced adjudicators. New readers are trained by their expert counterparts by reviewing a dozen student files together. This ensures continuity and that reviews "fit the norms of the university."

This project did not explicitly examine whether schools were evaluating the efficacy of their admission requirements on a periodic or ongoing basis to assess what was required to ensure success. The lack of review makes it difficult to demonstrate that using these evaluation measures yield better students. We asked our interview participants in BC how they had prepared or were preparing for the upcoming changes to BC's Grade 10-12 assessment framework; interviewees responded that their institutions had made "book-keeping" changes to adapt to the new grade 12 assessments , and that faculty and academic governance had been collaborative and open to adapting to these changes. For the usefulness of numeracy and literacy assessments in determining admissions, the consensus was that it was too soon to tell or be able to assess their usefulness.

During our discussions with interview participants, it became clear that their admission practices ranged from what works best for individual programs to what works for a broader institutional community or communities. As Table 2 demonstrates, "good practices" describes the efficacy and advantages of practices for institutions as an individual unit. "Good practices" are typically not scalable beyond the institution itself, but are useful for an institution to test new admission practices and to build capabilities within its community. "Best practices", on the other hand, offer suggestions and opportunities for other institutions to adopt or adapt, and are systematized at a broad level. "Best practices" provide benchmarks and guidelines for practices, and demonstrate effective or proven models. **Table 2** summarizes these differences.

"Good" versus. "Best" Practices

Table 2: Differences between Good and Best Practices

Good Practices	vs	Best Practices
Operate at a unit level. Scaled from individual program to institutional context.	VS	Operate at a system-wide level. Scaled from a single post- secondary institution to a variety of different post-secondary institutions.
Criteria of interest aligned with institutional mandate, mission and goals.	VS	Criteria of interest aligned to a whole-system context, including secondary, economic, and labour factors, and adopt ethical and fair practices suited to any program or field of study.
Developed to meet goals for programs, learner experience, success and outcomes.	VS	Interrogates and augments program and learner experience, goals and outcomes
Establishes trust between departments and programs, as evidenced in agreed-upon policies, procedures and protocols.	VS	Establishes trust between secondary schools, communities, post-secondary institutions, governing bodies, and broader publics.
Consistent professional development and reader training.	VS	Consistent, ongoing professional development and reader training, including training on cultural competency and unconscious bias.
Calibration of knowledge for fairness and consistency.	VS	Calibration of knowledge about fields and broader public to improve transparency, fairness, and public trust.

In assessing BC's diverse post-secondary landscape, we must emphasize that there is no 'one size fits all' model or framework. Instead, we offer these processes as examples of "Next" practice that embody effective practice.

A number of exemplary admissions practices surfaced during our interviews. As "next" practices, these demonstrate innovative methods that "enable breakthrough innovation in organizations" (Nidumolu, Ellison, Whelan, and Billman, 2014, para. 41). In examining these practices, we have not only identified opportunities for innovation, but have also noted the structural and systemic attributes which support "next" practices.

"Next" Practice Exemplars

In assessing BC's diverse post-secondary landscape, we must emphasize that there is no 'one size fits all' model or framework. Instead, we offer these processes as examples of "Next" practice that embody what Coleman and Keith (2018) describe as effective practice. Effective practices in admissions include mission alignment, consideration for a student's potential for success and contribution, and consideration of the complexity and intersection of academic, non-academic and contextual factors. "Next practices" are examples of how admissions practices can evolve to anticipate and respond to an increasingly complex context.

Royal Roads University and the West Shore Initiative

Royal Roads University has a history of non-traditional admission practices and competency-based curricula, dating back to their inception as a University. Their admissions practices involve trying to find alignment between what applicants want and what Royal Roads can offer. They also take professional or work experience into account, particularly for entry into programs where life experience can offer additional insight and context for the students' learning. Even with high-demand programs, the University uses rolling admissions (basically first come, first served) setting minimum threshold standards, evaluating applications as they come in, and, once the program fills, placing applicants on a waiting list, or offering them a seat in the next available intake. These practices have positioned Royal Roads to be less concerned about the grade 10-12 shift in assessments and instead, as Peter Dueck describes, intend to amplify and work with the high school structure.

The University is located within a school district that sees a mere 17.2% of high school students transitioning to university, in contrast to the provincial average of 34.1% (Royal Roads, 2019, p.4). As a result, Royal Roads University, the University of Victoria, Camosun College, the city of Langford, the Scia'new First Nations, and the Sooke School District have formed the "West Shore Initiative"— a program that transitions high school students to post-secondary study. The feasibility report for the Initiative states that "students are increasingly looking for more dynamic, adaptive, personalized and student-focused learning. They expect significantly more flexibility, whether that be in admissions and prior learning assessments; in ubiquitous 24/7 access and mobile learning; in accelerated and integrated learning...or in learning that focuses less on credentials and more on competencies" (Royal Roads, 2019, p.25).

The West Shore Initiative program will be aligned with BC's K-12 curriculum, and is one of the few examples we found that fully embraces the new secondary structure and is prepared to align secondary-school exit expectations with post-secondary institutional admission requirements. Royal Roads' proposed program for the West Shore Initiative lists only four admission requirements: Math 11, English 12, an interest in civic engagement, and a desire to participate in a learning community (Royal Roads, 2019, p.27).

Royal Roads' teaching approach is challenge-based learning that addresses community-based problems. To date RRU has run a one-day session with high school students where they presented a problem/challenge and helped them solve it. Finally, in order to understand the cause and effect of addressing institutional responses to socio-economic barriers, the participants in the West Shore Initiative express a need for statistics, such as "population growth forecasts, graduation and transition rates, and enrolment projections" (Royal Roads, 2019, p. 5). These data will help to ensure that future programs are sustainable and realistic.

University of Washington

The University of Washington (UW) have developed a non-traditional model of holistic review for their freshman admissions. This works well for UW — they currently receive twice as many applications as there are spaces available, and academic test scores for applicants are generally very high. If UW were to rely only on test scores and academic standing to evaluate applications, their benchmark for acceptance would be very high and they would be forced to reject many qualified applicants.

UW's holistic admissions process has two categories of review: the academic portion and the personal portion. The academic portion includes reviews of course works, grades, trends in grades, SAT scores, and grades from the applicant's final year of high school. For context, UW takes into consideration trends in grades, grades from schools known for grade inflation, and grades from feeder schools. The personal portion reviews a mix of activities and achievements (e.g. arts, athletics, jobs), examples of leadership, examples of hardship, and examples of overcoming adversity. Because UW aims for a diversity of applicants, they ask students to describe their personal/life experiences in a variety of ways, acknowledging that students from differing backgrounds require equitable access. They also use data such as history of family education levels, family income, high school environment, and socioeconomic context, taken from the College Board's LandscapeTM data set. Landscape TM data provides information on districts' lunch programs, college-going rates, family income, neighborhood income, crime rates, and housing stability.

UW's admission resources and processes are relatively streamlined. Each application is reviewed by admissions staff to make sure that the application is complete. At this point, all grades on transcripts are converted to a 4.0 grading scale. The personal portions of applications are reviewed by pairs of readers. Administrators and faculty help determine the calibration and direction of assessments, keeping the objectives of the faculties in mind. Then a small group of readers and administrators synchronize their results and resolve any differences in evaluations. If two readers are too far apart in an assessments, a third reader is automatically invited to review the application. Finally, each category of the personal portion of the application is given a numeric value by the readers, ranging from one ("weak or no evidence of potential to enrich the student body with talents, perspectives, or diversity-enriching backgrounds") to nine ("exceptional characteristics and ability to contribute unique talents, perspectives, or diversity-enriching backgrounds to the student body"). In order to ensure that the criteria being assessed are applicable to the University's mission and program values, the admissions department produces a report every few years for faculty members to review. This report allows the admissions department to review its processes and outcomes and receive feedback. UW do not claim that their holistic review process would work for other universities, especially universities struggling to fill seats, but they remain very satisfied with their processes and outcomes.

Emily Carr University of Art + Design (ECUAD)

Art and design programs and schools have a tradition of using portfolios as the primary criterion for program admission. In the past several years, ECUAD has expanded this requirement to include examples of an applicant's creative practice, common process projects, and written responses. The submission requirements are described in detail for applicants, and recruitment staff engage secondary school students in portfolio development workshops to support greater understanding of these requirements. An example of a portfolio feedback form is shown in Appendix 1. In collaboration with peer-based member associations, such as the National Portfolio Day Association (NPDA) and the Association of Independent Colleges of Art and Design (AICAD), applicants to ECUAD and other NPDA member schools such as Kwantlen Polytechnic University can also receive feedback at NPDA events about their portfolios, in advance of application deadlines. Secondary school applicants can also receive informal advising for portfolio development through the AICAD Portfolio Review Portal.

Portfolio reviews are a collaborative process between admissions and academic affairs aimed at highlighting faculty skill set and expertise in evaluation. Portfolio assessment rubrics are updated and standardized by student services in consultation with faculty. Portfolio reviews may be done individually and in teams, with multiple reviews of each application using SlideRoom software, with admissions staff supporting faculty in providing context and expectations for reviews. For admission to graduate programs, faculty review the application materials ahead of time, including a three-minute video response submitted by applicants, and then convene as a group to determine applicant rankings. In addition to portfolio requirements, academic requirements must also be met to qualify for an offer of admission.

British Columbia Institute of Technology (BCIT)

In 2015, BCIT overhauled their admissions process to address changes in application patterns that emerged when the institute began to participate in a province-wide application portal. Faced with a significant number of applicants who never completed the process, BCIT sought to develop more efficient use of staff resources.

Entrance requirements across the board were reviewed, and any program-level requirement for competency-based assessment needed to be justified and approved by BCIT leadership. Only 20 programs in areas of health and engineering out of all 380 programs offered by BCIT now include competency-based criteria, typically using interviews, including Multiple Mini Interviews (MMIs), as a determinant for final decision-making.

Additionally, in 2015 all applicants to BCIT began self-reporting their grades for admission. Prospective students were advised to ensure they met program requirements. As part of the intake process, an annual post-admission audit required documents to be submitted from a random sample of 30% of admitted students. This audit is now in its fourth year and just 2% of admitted students have been found to be non-compliant in some way. BCIT does not rescind admission for these students. Instead, they review the student's progress and offer them additional support to mitigate any potential academic progress issues.

The total number of applications to BCIT have declined, enabling staff numbers be maintained but redirecting staff to more value-based activities, such as service to applicants and facilitating quicker turnaround times for decisions. They are now able to participate in more BCIT events, as well as selection committees and general committees.

Nicola Valley Institute of Technology (NVIT)

NVIT, an "Indigenous centre of excellence," uses a variety of assessment processes to determine student proficiencies and literacies, including Accuplacer and TOWES. NVIT have an outstanding example of non-academic assessment through their Community-Based Assessments (CBAs). A CBA is a comprehensive process that requires NVIT staff to travel to different regions to meet and assess learners. CBAs take place in community in order to address the needs of multiple prospective learners at once. The assessment includes "in-community assessment preparation, assessment invigilation (English and Math), assessment review, creation of individual education plans for each prospective learner, a summary that highlights and identifies possible educational priorities and opportunities for the community, [and] provides the prospective learner with the experiential learning and information necessary to start and/or return to their journey" (www.nvit.ca/communitybasedassessment.htm).

The CBA process requires two days. The first day focuses on reducing any fear or misunderstandings about post-secondary admission processes and programs. Elders are present, and cultural activities, including prayers and sharing food and snacks, are an important aspect of building community trust. NVIT reviews key concepts in Math and English, and orients prospective students to the language used in assessments. Any practice assessments that take place are not timed.

On the second day of the CBA, NVIT conducts the assessment. The number of students participating in CBAs vary. NVIT has conducted CBAs with as few as two to three students, and as many as 20 to 25. These assessments are sometimes program-specific, and sometimes assist communities to understand where their educational journey would start. The assessments result in a global report including indicators of success, and also help communities prioritize programming. Community-based assessments are staff-intensive and require significant time to organize and conduct. It's part of NVIT's mandate, however, to reduce barriers to education and to reduce fear. Therefore, whatever resources are needed for these events are made available.

Sustainable Energy Engineering, Simon Fraser University (SFU)

In launching the Faculty of Applied Sciences undergraduate degree in Sustainable Energy Engineering (SEE) in 2019, SFU made a conscious decision to introduce a broad-based admission process. Having undertaken a substantive review of all of the university's undergraduate admission models for domestic students, they looked at admissions models across the country, including the model used by UBC. They chose to leverage the launch of the degree to implement centralized, broad-based admission for SEE.

Because SEE was a new program, funding was available and allocated to support implementation of broad-based admission. SFU worked with consultants from AACRAO to develop a supplemental application with questions applicants must respond to, a scoring rubric as well as training for the assessment of responses. SFU's Beedie School of Business have been working with broad-based admissions for several years, but the process has been managed within that faculty and is not centralized.

The Faculty of Applied Sciences developed and articulated specific competencies that provided a framework of what they were looking for in students, forming the basis for the applicant questions. From there, a scoring rubric and training for evaluation was developed. Appendix B shows a list of five non-cognitive variables developed with the guidance of AACRAO. These variables include critical thinking and analytical skills, effort regulation, problem solving, motivation, and community.

The Faculty of Applied Sciences committed to providing faculty and staff readers who were matched with Student Services readers to ensure at least two readings of each application. The Faculty of Applied Sciences is now considering rolling out this supplemental application for prospective students to all programs within the Faculty.

Recommendations for Future Practices

In seeking to identify guidelines or tools to assist post-secondary institutions in the process of admitting students to competitive programs, we did not anticipate the breadth of interpretation we encountered in the use of the term "competency-based" in conjunction with admissions. There is inconsistency in the use of the term 'competency'; often there is a misunderstanding whether this term refers to subject-related knowledge and skills, general academic competencies and literacies, or personal competencies and personal experiences.

In the introduction to our survey, we offered the following explanation:

For the purposes of this project, we are describing competency-based assessment as a framework to collect evidence of competence, in order to evaluate applicants holistically. Competency-based assessment is therefore non-traditional in terms of admissions processes that rely solely on required subject-area grades or demonstration of other specified academic benchmarks or criteria (e.g. TOEFL, IELTS, ACT, MCAT, GRE).

As our data collection progressed, we understood that our participants could identify methods of assessment that were competency-based, such as supplemental applications, holistic and broad-based admissions, but we did not find a true alignment of this term to the varying methods and practices. We have understood that competency-based vocabulary is inherently opaque (as shown in **Figure 4**: Overlapping Admission Strategies), and that this can result in a conflation between practices and goals that could affect how competency-based practices are adopted and implemented.

A series of recommendations emerged from a brief comparative analysis of data from our survey respondents and our interview participants. These recommendations are intended to respond to the shifting landscape of admissions practices, and take the form of strategies to mitigate any risk that emerges from a change in admission practices.

Recommendation 1:

Align admissions practices to institutional purpose and context

A key attribute of effective holistic admission is its alignment to an institution's mission (Coleman & Keith, 2018). While this alignment exists at many schools involved in this research project, the impetus to use competency-based criteria for admission most often originated from individual programs seeking additional information to differentiate between high-achieving applicants. These applicants demonstrated the same or very similar academic capacity on measures such as test scores or high school grades. "It is true that many of the tools used in the admission decision are imperfect predictors of success...the criteria used to render access to higher education do not always generate an accurate assessment of the applicant" (Arida, 2014, p. 161).

In adopting competency-based criteria for admissions, programs need to understand the purpose and goals of including additional evaluation criteria, and to consider not only how these measures align to the institutional mission but also whether a broadened and systemic context can address concerns around evidence, resources, bias, and transparency. By fully understanding at the outset the ultimate goals of including competency-based criteria as part of admission requirements, and asking faculties to articulate their ambitions, institutions are equipped to build ways to measure concept against objective. For example, if a program's stated goal is to attract "stronger students", what is meant by "stronger"? And how can the criteria of interest be tested to offer proof of whether those students are applying or being accepted? Is it possible to demonstrate that competency-based criteria will yield stronger students than if only academic merit criteria were used?

Recommendation 2:

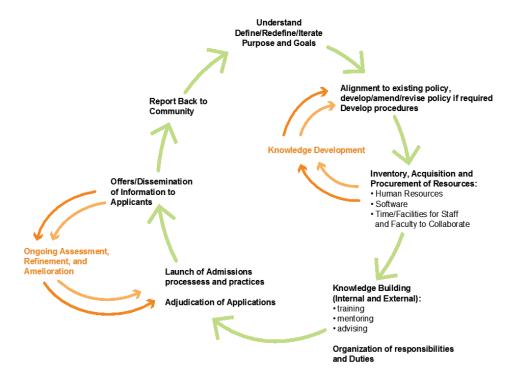
Make systems, structures, and resources transparent to everyone

Resources are required for a change towards a system of competency-based admission processes. Overall, the availability and use of resources, or the scarcity of resources to be able to implement desired changes, remains inconsistent throughout post-secondary institutions in BC and elsewhere. This inconsistency may be an obstacle to developing future shared and best practices. A system of competency-based admissions practices requires knowledge, policy-building, training (including training for cultural competency), time, expertise, and a commitment to regular analyses and reporting. Many of the competency-based admission processes we identified required participation by faculty, who often consider this work important but additional labour. Some schools have the resources to draw on internal and external expertise, adapt it, and then train staff and/or faculty. Other schools outsourced the expertise entirely, leaving third party adjudicators such as CASPer® to produce the insights into evaluation of qualitative assessments. Furthermore, not all institutions have transparent flexible admissions policies and procedures. When institutional knowledge is held by individual staff or faculty, this is problematic for future training.

There is no one-size-fits-all formula for an institute, college, or university to implement competency-based admission processes. The needs of BC institutions are very diverse, and the contexts of institutions — for example, geographic, mandates, and populations — are equally diverse. The capacity to support admission processes also relies on many variables.

Institutions with systemic knowledge development and building, collaboration, and communication were well positioned to make small changes as their admissions processes adapted to emerging admission goals. With this in mind, we recommend that institutions work within their capacity to develop a reliable, systematic approach to using competency-based criteria for admissions. This process requires stated interests and goals that align with institutional objectives, are measurable, and reflect the needs of curriculum and programs. Figure 4 illustrates a possible systematic approach towards the development and maintenance of a competency-based admissions practice. A successful system requires a clear purpose and goals, knowledge building, and specific points of communication.

Figure 4: A Systems Approach to Admissions Practices



It is important for those involved in the admissions process to understand whether they are building a mission-aligned, program-aligned, or student-aligned process. Policies and assessment measures should confirm and amplify these goals. Post-secondary institutions should amend, update, or create policies that make admissions processes very clear, and describe procedures to effectively implement these policies. Where possible, a clear and understandable appeals process is helpful to guide applicants who may not understand why they were not successful in their application, what recourse may be available, and under what circumstance they are entitled to a second review or appeal. Policies and procedures should be designed with realistic and attainable resources in mind, particularly where additional financial costs are involved.

Most importantly, we recommend that admissions staff and program faculty collaborate in knowledge building in shared policies, goals, and practices. A full and reliable admissions system requires both staff and faculty to understand their shared duties and responsibilities, and in retaining institutional knowledge through training and mentorship. According to Royal Roads' Feasibility Report (2019), students are also seeking greater flexibility and removal of barriers to be willing to participate in post-secondary programs. Institutions being able to provide all applicants with feedback and suggestions not only builds a healthy and communicative feedback loop with future students, but creates a mechanism that allows each institution to better understand where their admission process needs improvements and changes. How each institution builds this feedback loop will depend on institutional goals and resource allocation, and requires an understanding of where communication must occur to intervene, teach, encourage, and respond to future students. Finally, a healthy admissions system commits to providing feedback to the institutional community on a regular basis (yearly or every two years) so that community members understand the effects of their decisions and goal-building.

Most importantly, we recommend that admissions staff and program faculty collaborate in building shared policies, goals, and practices. A reliable admissions system requires both staff and faculty to understand their shared duties and responsibilities, and retain institutional knowledge through training and mentorship. Institutions being able to provide all applicants with feedback and suggestions not only builds healthy and communicative feedback with future students, but also creates a mechanism that allows each institution to better understand where their admission process needs improvement. How each institution builds this feedback system will depend on institutional goals and resource allocation. It also requires an understanding of where communication must occur to intervene, teach, encourage, and respond to future students. Finally, a healthy admissions system commits to providing feedback to the institutional community yearly or every two years, so that community members understand the effects of their decisions and goals.

Recommendation 3:

Develop readers' consistent interpretation and reliability in assessing submissions

There are disconnects between faculty-led and centralized admission processes in many of the institutions we spoke with for this research. Therefore, there was inconsistency or a lack of communication in how non-academic submissions were interpreted and scored. Furthermore, interview participants expressed concern that the practices were not systematized to allow mentorship, training, and ultimately, consistency. Some institutional representatives expressed a concern that conscious or unconscious bias was unavoidable in evaluation of admissions material beyond academic grades and transcripts. Arida (2014) notes that "[e]ven the use of broad-based admission criteria, such as extra-curricular activities, personal profiles, and other assessment of character are rife with issues of validity and bias" (p. 161).

Many health-related or nursing programs appear to cycle the format of their admissions processes through transcript-only, to MMIs (Multiple Mini Interviews), to outsourcing, to CASPer®, only to return to transcript-only processes again — all in the pursuit of objectivity. Faculty readers and reviewers participate in admissions evaluations in good faith. Their goal is to find the "best" students for their programs, and in the case of graduate and post-graduate programs, the students that are not only best for the program, but that also possess the characteristics to become leaders in their fields, and viable research and teaching assistants.

Some of the best practices described by our research participants included a standing committee of readers and interpreters, with representation from both faculty members and admissions staff. This group mentors and coaches new members each year to ensure consistency in updating admissions policies, evaluating applicants, and advising the broader community.

Recommendation 4:

Create processes that amplify learning instead of replicating transactional pass/fail binaries

Universities using holistic and competency-based methods commonly state that their goal is to "open the doors wider" for students (AACRAO interview, Feb. 7), and to consider non-academic factors in determining applicants' potential success. While many institutions use some form of competency-based assessment, we found that most, if not all, participating institutions translated the results of these assessments into a number, which results in a ranked list of candidates. The rankings are then used to determine a threshold, and students who are not ranked above the threshold are denied acceptance.

The use of numerical rankings and the rubrics which guide evaluators are not always clear. Students required to participate in CASPer® testing are not provided with their results; scores are sent directly to the participating schools by CASPer®. In essence, this means that applicants are already experiencing a pass/fail binary. Students may not question why they were successful applicants when their program recognizes 'the whole person,' but applicants who are rejected after they have revealed inherently personal information are left in a vulnerable position. What, then, is the responsibility of institutes, colleges and universities to these applicants and to the communities they represent? Bovy (2013) expresses concern for rejected students when "the system for applying to selective colleges in the United States asks students to view the process as, well, personal" (para. 1). She takes issue with asking applicants to make themselves vulnerable for the sake of a post-secondary application, and then leaving them feeling exposed after the process is completed.

Institutions should consider providing feedback to and acknowledging unsuccessful applicants, in order to provide them with a recourse and other opportunities for entry or transfer. In order to provide unsuccessful applicants with a pathway to re-apply, schools must first ensure that their process explains what they are asking students to reveal about their personal lives, why it matters, and how these narratives will be considered in the overall evaluation of their application. By making the importance of criteria visible, by understanding where the institution can offer information and learning opportunities to applicants, and by providing feedback for future improvement, explanations, or appeals, admissions professionals could position themselves as educators engaged within the post-secondary landscape, rather than merely communicating the result of admissions in a summative transaction through acceptance or denial letters.

Recommendation 5:

Build bridges, not gates, for greater accessibility

One way of addressing the acceptance/denial binary of admissions is to consider the admissions process as a way to build bridges for students. This perspective sets expectations for applicants through transparent policies, procedures, processes, evaluations, and feedback loops, rather than creating gates that students must pass through or overcome to become a student or to access internal institutional information. Two approaches to building bridges are offering feedback as a form of critique and ensuring that students understand how to appeal an admission decision. These approaches can still be considered mission-driven, and can ensure that colleges, institutes, and universities remain accountable to goals of access, equity, diversity and inclusion. This process does not need to add a layer of communication or bureaucracy to the admissions process. As shown in Appendix A, Emily Carr University provides a feedback form for applicants that also doubles as a working rubric for faculty evaluators and readers. Students are able to request a copy of the rubric if they wish to know how they were evaluated and where they have an opportunity to improve their work.

It is difficult to provide feedback to applicants who take an interview test with CASPer®, so that they can understand where they might improve their understanding of what the program is looking for. That assessment remains opaque in its processes and provides no information to participants after they take their tests. Many admissions departments, however, have an opportunity to coach students prior to application (e.g. through direct communication, through specific associations, or through community programming) and to use consistent coaching for unsuccessful applicants looking for advice. Many admissions essay or interview questions ask "describe a situation where..." or "describe a time in your life when...", and these open-ended questions provide

opportunities for learning. AACRAO (American Association of Collegiate Registrars and Admissions Officers), which advises several Canadian schools including SFU, UBC, and the University of Toronto with respect to broad-based admission processes, emphasizes this approach. AACRAO also suggests that admissions professionals tell students where their responses may be further developed, what details they could emphasize, and why these details are important for readers to know (AACRAO interview, Feb. 7). Extending a bridge towards prospective students demonstrates to students how an institution describes success.

Conclusion

Our research revealed that although many BC schools make use of competency-based criteria for admissions, there is no coherent and systemic adoption of these criteria across a range of programs. The data from institutions that have experience with these practices demonstrate that there is a need to rely on whole systems within and throughout an institution, rather than on tactics from individual programs and departments. Like all measures, "the extent to which admission criteria act as a precise screening tool for success or failure in university is commonly overestimated" (Arida, 2014, p. 150). Accepting this inherent fallibility, and recognizing that all schools seek to be distinct in their needs to recruit, retain and graduate successful, capable students, we suggest that there is no singular, identifiable admission system that will meet the needs of all institutions. However, there are examples of consistent, transparent and effective practices. These examples highlight the need for further explorations of the challenges facing contemporary admissions practices. The post-secondary institutions that have demonstrated "next" practices demonstrate that admissions processes are about supporting student learning, not gate-keeping.

In describing the critical role of admissions in post-secondary education, Arida (2014) asserts that:

By strategically using a variety of different admission decision-making models, the selective public Canadian university can exert control over its environment while still remaining true to its fundamental purpose and role within society... Imposing admission criteria determined by student behaviours forces the student to adapt to the demands of the organization in order to gain its resources. This in turn gives the organization greater control over its environment. This control can be seen as a benefit to the organization and to the environment itself. As long as the behaviours that are encouraged to fall within the accepted social imaginary of what is expected from both the institution and the student, the outcome is positive...a student focused upon a particular institution can shape themselves into whatever form the institution wants to see. In doing so, the student chooses the institution more so than the institution chooses the student (p. 167).

Can a student shape themselves into whatever form the institution wants to see? Or is there potential to expand the scope of student choice, to connect their lived and scholarly experiences to a variety of pathways? We would extend this concept beyond what Arida deems "selective" Canadian universities to any post-secondary institution. We propose that admission criteria can be *a nexus* of mutual understanding for post-secondary institutions and prospective students, where they can explain to each other who they are, what they are interested in, and what they bring to the table. In this way, it is possible for students and schools to have reciprocal agency towards their goals.

During the course of our conversations, one of our research participants asked whether there would be a common or universal list of competencies to work from. Most often, the admissions professionals we interviewed identified the development of competencies as distinct and aligned to specific program needs. However, a scan of the landscape reveals that while programs may describe their desired competencies with slight differences, they are looking for many of the same things. In other words, the various tactics and goals of most of our interview participants have much more in common with other institutions than they appear to realize. Most competencies throughout institutes, programs, and professional fields can be distilled down to seven universal competencies: leadership and professionalism, motivation and self-determination, scholarly rigour, critical and ethical thinking, self-reflection and personal responsibility, and community engagement, as shown in **Figure 5**.

Is there a potential to work collectively toward more consistent processes, while still acknowledging differing types of institutions and distinct goals and mandates? "Collectively, removing barriers to university participation, providing greater opportunities to earn

money while studying, and delivering relevant and attractive programs will increase the number of students who pursue and obtain university degrees" (Royal Roads, 2019). There is an expansive horizon for exploring the use of competency-based criteria in admissions. There is also a need to better understand the intellectual and practiced issue of transparency, and the observed reluctance by admissions professionals and their advisors to render visible the evaluation rubrics used in decision-making. Understanding the implications of transparent rubrics could be a subject of future research. Research could also examine renewed contemporary competencies for admissions professionals as they define, design and build effective, scaffolded processes. Finally, the events of the spring of 2020 and the effects of COVID-19 on every aspect of education have emphasized the precarity of grades as a primary determinant of success. How do we respond effectively in qualifying applicants when these data are no longer consistent or when admission practices and processes cannot be sustained? This situation emphasizes the need to ensure that enrolment management systems are viable and adaptable.

Figure 5: Seven Shared or Universal Competencies Across Universities and Programs

Aspirational/ Shared Competencies	University of California, Berkeley, General undergraduate admissions	University of Bristol: Engineering Maths	Subject Benchmark Statement: Art and Design (UK Quality Code for Higher Education	Emily Carr University Portfolio Assessment Criteria	Thompson Rivers University: 8 Critical Competencies	SFU Non- Cognitive Variables (for Sustainable Engineering)	BCIT Nursing (Uses competencies from CASPer testing)
1. Leadership and professionalism	Leadership ability		The ability to communicate in a range of formats			Effort Regulation	Professionalism
	Character				Communications Abilities		Communication
2. Motivation and Self- Determination	Motivation	Declared interests and aspirations				Motivation (student's goals for program)	Motivation
	Initiative		The capacity to work independently, encouraging resilience and self-determination	Inventiveness	Applied knowledge and abilities		
3. Scholarly Rigour in program of choice	Tenacity	Commitment to the subject	An aesthetic sensibility	Creativity	Numeracy skills	(academic portion of admissions)	Resilience
4. Problem- Solving and Judgement	Insight		An appreciation of quality and detail	Creative insight and process	Problem solving and decision- making abilities	Problem solving	Problem solving
	Originality	Problem solving and analytical skills	Capacity to be creative	Conceptual or technical skill			
5. Critical and Ethical Thinking	Intellectual independence	Evidence of clear thinking and understanding	The Ability to conduct research in a variety of modes	Experimentation	Independent study and learning skills Critical Thinking	Critical thinking and analytic skills	Ethics
6. Self-reflection and personal responsibility	Responsibility	Positions of responsibility	The ability to factor ethical considerations into creative practice	Written aptitude	Information organization abilities		Self-awareness
	Maturity		Critically reflecting on one's own learning and development				Collaboration
7. Community Oriented / engagement with others	Demonstrated concern for others and for the community	Experience that indicate the contribution an applicant will make to the life of the University	An appreciation of diversity	Community and contextual awareness	Intellectual Maturity	Community (contributions, influence)	Empathy
			Skills in team working				Equity
	Source: https:// admissions. berkeley.edu/ freshmen- requirements	Source: http://www. bristol.ac.uk/ study/media/ undergraduate/ admissions- statements/2020/ engineering- maths.pdf	Source: https://www.qaa, ac.uk/docs/qaa/subject- benchmark-statements/ sbs-art-and-design-17, pdf?sfvrsn=71eef781 16	Source: See Appendix A	Source: https:// tru.ca/ shared/ assets/plar- competency- portfolio-16076. pdf	Source: See Appendix B	Source: https:// takecasper.com/

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4. Problem- Solving and Judgement	Insight		An appreciation of quality and detail	Creative insight and process	Problem solving and decision- making abilities	Problem solving	Problem solving
	Originality	Problem solving and analytical skills	Capacity to be creative	Conceptual or technical skill			
5. Critical and Ethical Thinking	Intellectual independence	Evidence of clear thinking and understanding	Intellectual enquiry	Experimentation	Independent study and learning skills	Critical thinking and analytic skills	Ethics
			The Ability to conduct research in a variety of modes		Critical Thinking		
6. Self-reflection and personal responsibility	Responsibility	Positions of responsibility	The ability to factor ethical considerations into creative practice	Written aptitude	Information organization abilities		Self-awareness
	Maturity		Critically reflecting on one's own learning and development				Collaboration
7. Community Oriented / engagement with others	Demonstrated concern for others and for the community	Experience that indicate the contribution an applicant will make to the life of the University	An appreciation of diversity	Community and contextual awareness	Intellectual Maturity	Community (contributions, influence)	Empathy
			Skills in team working				Equity
	Source: https:// admissions. berkeley.edu/ freshmen- requirements	Source: http://www. bristol.ac.uk/ study/media/ undergraduate/ admissions- statements/2020/ engineering- maths.pdf	Source: https://www.gaa.ac.uk/docs/gaa/subject-benchmark-statements/sbs-art-and-design-17.pdf?sfvrsn=71eef781 16	Source: See Appendix A	Source: https:// tru.ca/ shared/ assets/plar- competency- portfolio-16076. pdf	Source: See Appendix B	Source: https:// takecasper.com/

References

- Arida, A. (2014). *In pursuit of the "right" student: a case study in assessing the effectiveness of enrolment management in shaping a first-year class.* University of British Columbia. Retrieved from https://open.library.ubc.ca/collections/ubctheses/24/items/1.0165892
- Bovy, P. M. (2013, December 17). The false promise of 'holistic' college admissions. *The Atlantic*. Retrieved from https://www.theatlantic.com/education/archive/2013/12/the-false-promise-of-holistic-college-admissions/282432/
- British Columbia Ministry of Education. (2017, January). *Graduation Assessments: Design Framework and Assessment Structure*. Discussion Paper. Retrieved from http://blogs.ubc.ca/lled3662017/files/2017/08/graduation-assessments-design-framework.pdf
- Coleman, A. L., & Keith, J. L. (2018). *Understanding Holistic Review in Higher Education Admissions*. Retrieved from https://professionals.collegeboard.org/pdf/understanding-holistic-review-he-admissions.pdf
- Jaschik, S. (2017, May 22). An admissions reformer takes stock of the use of noncognitive variables. Retrieved from https://www.insidehighered.com/admissions/article/2017/05/22/admissions-reformer-takes-stock-use-noncognitive-variables
- McQuarrie, F. (2016). Changes in K-12 Education: Implications for the BC Post-Secondary System. Retrieved from: https://www.bccat.ca/pubs/Reports/K12Changes2016.pdf
- Nidumolu, R., Ellison, J., Whalen, J., & Billman, E. (2014, October 7). *The Collaboration Imperative*. Retrieved from https://hbr.org/2014/04/the-collaboration-imperative-2
- Nixon, D. (2018, May 17). B.C. leads the push to eliminate letter grades from school report cards. Retrieved from https://www.theglobeandmail.com/news/british-columbia/bc-leads-the-push-to-eliminate-letter-grades-from-school-report-cards/article33907027/
- Royal Roads University (2019, March 25). Assessing Post-Secondary Education Needs in the West Shore. Retrieved from: https://news.gov.bc.ca/files/RRU_West_Shore_Report_Only.pdf
- Sedlacek, W. E. (2005). The case for noncognitive measures. In W. Camara and E. Kimmel (Eds.). *Choosing students: Higher education admission tools for the 21st century* (pp. 177-193). Retrieved from http://williamsedlacek.info/publications.html
- Sedlacek, W. (2011). Using noncognitive variables in assessing readiness for higher education. *Readings on Equal Education*, *25*, 187-205. Retrieved from http://williamsedlacek.info/publications.html
- Scott, L. D., & Zerwic, J. (2015). Holistic review in admissions: A strategy to diversify the nursing workforce. *Nursing Outlook*, 63(4), 488–495.
- Statistics Canada (2016). *Canadian Demographics at a Glance* (2nd edition). Statistics Canada Catalogue no. 91-003-X. Retrieved from https://www150.statcan.gc.ca/n1/pub/91-003-x/91-003-x2014001-eng.pdf

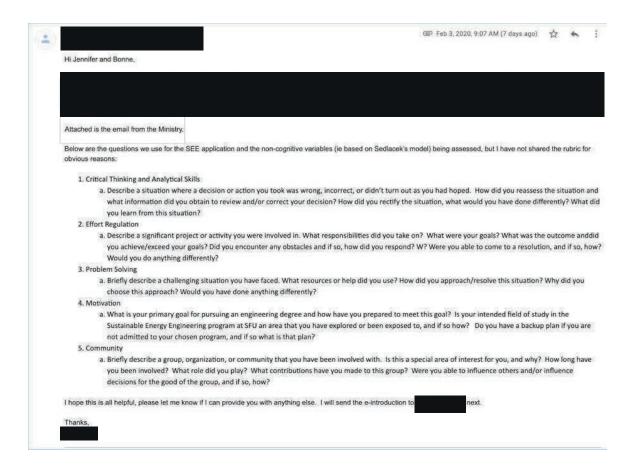
Appendix A:

Portfolio Feedback Form, Emily Carr University of Art + Design (as referenced in Figure 5)

EMILY CARR UNIVERSITY of ART	+ DE	SIGN Portfo	lio Feedback	
		Well Developed	Satisfactory	NeedsImprovement
Conceptual Development			•	
Process: Research, Notebook, Sketches				
Manual Skills, Craft Execution				
Creativity, Inventiveness. Experimentation				
Diversity of Media, Materials, Explorations				
Presentation, Editing, Documentation of Work				
Inventory of Portfolio Drawing Color Painting Sculpture Digital Performance New Media		Animation Photography Video Sket ches Film Installation Sound		Communication Design Industrial Design Interaction Design Ceramics Printmaking
dditional Notea:				
or more information on how to apply, including aca mily Carr University of Art + Design 20 East 1 ⁴ Avenue, ancouver BC, V5T 0H2 dmissions@ecuad.ca	demic	and portfolio requirem	ients, please visit our	website: www.ecuad.ca

Appendix B:

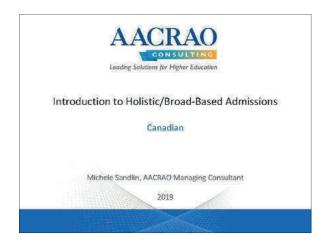
Non-Cognitive Variables Assessed in SFU's SEE Admissions Process (as referenced in Figure 5)

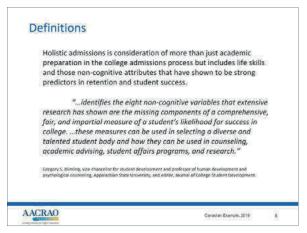


Appendix C:

Excerpts from AACRAO PowerPoint presentation, 2019

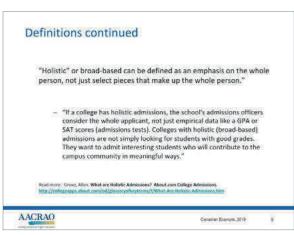
(Source: Michele Sandlin, Managing Consultant, AACRAO)

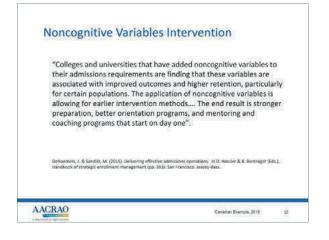












Noncognitive Variables

Non-cognitive is used to refer to variables relating to adjustment, motivation, and student perceptions, rather than the traditional verbal and quantitative (often called cognitive) areas typically measured by standardized tests (Sedlacek, 1998, 2004). While non-cognitive variables are useful for all students, they are particularly critical for nontraditional students, since standardized tests and prior grades may provide only a limited view of their potential.

(Sedlacek, W. E. (2005).

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Canadian Example, 2019

Noncognitive Variables

Noncognitive Variables

1. Positive Self-Concept: Demonstrates confidence, strength of character,

"There is evidence that the way students feel about themselves is related to their adjustment and success in college (Sedlacek, 2003, 2004). A strong self-concept is particularly important for students of color, students with disabilities, and women returning to school."

Realistic Self-Appraisal: Recognizes and accepts any strengths and deficiencies, especially academic, and works hard at self-development. Recognizes need to broaden his/her individuality.

Realistic self-appraisal is the ability to assess one's strengths and weaknesses and allows for self-development . . Realistic self-appraisal has been found to correlate with college grades, retention and graduation for students of all races., ."

Availability of Strong Support Person: Seeks and takes advantage of a strong support network or has someone to turn to in a crisis or for encouragement.

"Students who have done well in school tend to have a person of strong influence who provides advice to them, particularly in times of crisis."

Successful Leadership Experience: Demonstrates strong leadership in any area of his/her background (e.g. church, sports, non-educational groups, gang leader,

"Students who are most successful in higher education have shown an ability to organize and influence others."

AACRAO

Canadian Example, 2019

Noncognitive Variables

 Understands and Knows How to Navigate the System: Exhibits a realistic view of the system based upon personal experience. Committed to improving the existing system. Takes an assertive approach to dealing with existing wrongs, but is not hostile to society, nor is a "cop-out."

"The primary concern here is for dealing with the policies procedures and barriers, intentional or not, that interfere with the development of people."

4. Prefers Long-Range to Short-Term or Immediate Needs: Able to respond to

"Having long-range goals will predict success in college for students."

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Canadian Example, 2019

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Canadian Example, 2019

Noncognitive Variables

7. Demonstrated Community Service: Participates and is involved in his/her

"Having a community with which students can identify, and from which they can receive support, is critical to their academic success."

Knowledge Acquired in or about a Field: Acquires knowledge in a sustained and/or culturally-related ways in any field.

"The ability of someone to learn from experiences outside the classroom correlates with their success in school."

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Canadian Example, 2019

Robert Sternberg: Three Types of Intelligence

1. Componential

Ability to interpret information hierarchically in a well defined and unchanging context. Standardized tests.

2. Experiential

Ability to interpret information in changing contexts, be creative. Standardized tests DO NOT measure.

3. Contextual

Ability to adapt to a changing environment, ability to handle and negotiate the system. Standardized tests DO NOT measure.



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Canadian Example, 2019

Advantages of adding a Nonacademic/Noncognitive Process

- Research based
- Student development

Retention related

- Multiple ways to assess (Questionnaire, structured
- short answer, interview, essay, portfolio)
- Admissions, financial aid, student services, teaching, advising
- · Considers diversity, US or international
- Tested legally
- Community building
- · Revise to fit situation-flexible
- No cost
- High school counselors

approve

AACRAO

Canadian Example, 2019

- 1. Student disabilities
- 2. Students disclosing criminal or questionable behavior
- 3. Psychological or emotional issues
- 4. Cultural differences, needs

Issues to be prepared for

- 5. Academic and student services support
- 6. Transitional issues



AACRAO

Canadian Example, 2019

Influences across campus

- 1. Borderline admissions and denied decisions that are appealed
- 2. Student Support programs, Academic Support programs
- 3. Retention Efforts
- 4. Scholarship selections
- 5. Academic program areas
- 6. Orientation, Transition programs
- 7. Tutoring, academic preparation programs



Canadian Example, 2019

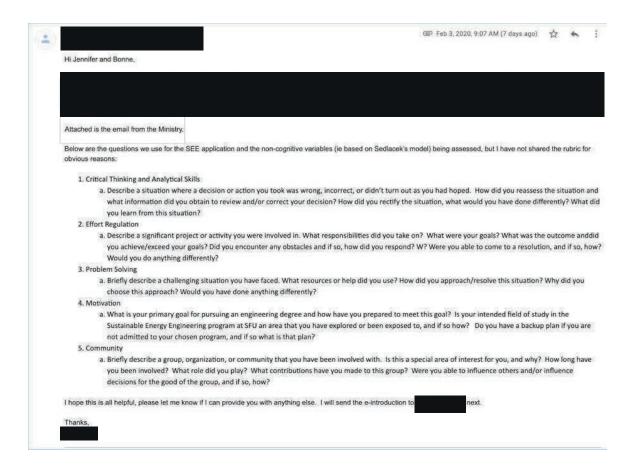
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Your guide through post-secondary education.

Appendix B:

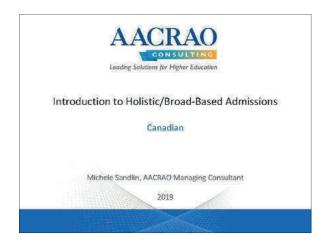
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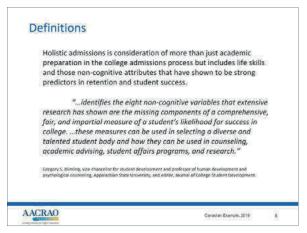


Appendix C:

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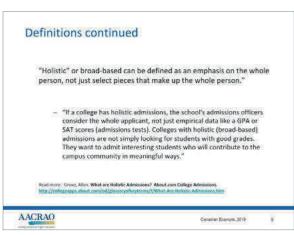
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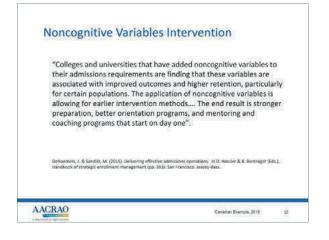












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AACRAO

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Canadian Example, 2019

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