Undergraduate Students’ Perceptions of their Learning Experiences at Simon Fraser University

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Table of Contents

1. Study Description 3
2. Summary of Results 3
3. Environmental Scan 4
4. Review of Existing Data about SFU Students 5
   4.1. SFU Undergraduate Student Surveys 5
   4.2. Who are SFU Undergraduate Students? 5
5. Student Focus Groups 6
   5.1. Overview 6
   5.2. Methods 6
   5.3. Description of Focus Group Data 9
   5.4. Interpretation of Focus Group Data 14
6. Comparison of Focus Group Results, UGSS Reports and Literature 15
7. Discussion and Recommendations 18
8. Conclusions and Next Steps 20
9. References 21
Appendices 23
Appendix A: Focus Group Protocol Used by Research Assistants 24
Appendix B: Focus Group Observer Note Taker Template 27
Appendix C: Participant Composition of Focus Groups 28
Appendix D: Initial Themes: First Impressions of the Focus Group Data 30
Appendix E: SFU Undergraduate Student Surveys 2013-2017 – Summary of Items Related to Teaching and Learning 31
Appendix F: Who are SFU Students? 34
1. Study Description

This project, led by the Teaching and Learning Centre (TLC) at Simon Fraser University (SFU), studied undergraduate students’ perceptions of their needs with respect to their learning experiences in credit-based courses. The aim was to identify the factors that students consider when assessing learning in their courses, and the implications of this for TLC’s educational development services, supports and practices. We hoped to learn what SFU students view as qualities or characteristics of courses and teachers that either enhance or inhibit their learning, and inspire or stimulate them to study. The project consisted of four parts: a review of existing data about SFU students including data from SFU’s Undergraduate Student Surveys (UGSS), an environmental scan, focus groups of undergraduate students, and a comparison of the focus group results with the UGSS and the literature on how students learn. The study was conducted over seven months from August 2017 to March 2018.

2. Summary of Results

Guided by four questions, student focus group participants shared their perceptions of how they learn at SFU and provided descriptions of their learning experiences. They also provided practical suggestions for improving courses, instruction and their learning experiences.

The focus group results were compared with the SFU’s UGSS reports and with the literature on student learning in higher education. The comparison found that the focus group results are consistent with both.

Specifically, seven themes were identified from the focus groups that reflect students’ perceptions of learning at SFU:

1. Applying knowledge and skills in a practical setting
2. Developing community and connection for learning and support
3. Large classes inhibit connection and learning
4. Use real-world examples, especially from instructor’s research, to make material relevant
5. Assessments that promote learning and that are fair
6. Improve training and teaching ability of teaching assistants (TAs)
7. Better prepared instructors and better organized course material

The UGSS reports, the environmental scan and literature, and the focus group results point to recommendations for enhancing educational development services, supports and practices at the TLC. Though the TLC has influence over only a portion of the factors
that affect student learning, it has many opportunities to improve student learning by working with faculty members, sessional instructors, TAs and students themselves.

3. Environmental Scan

An environmental scan helped to determine the extent to which similar studies have been conducted within Canada, both in terms of the subject of this study and the methodology. Two approaches were used to conduct the scan. First, a request was posted to the educational development community and second, an Internet search was conducted.

In the first approach, a request for similar studies was posted on the Educational Developers Caucus email list, a professional practice community with primarily Canadian members. Of the four people who replied, three indicated that they believe the study is important and they wanted to hear about the results. One respondent was part of a survey at Memorial University (Delaney, 2010) that focused on what students perceive as good quality teaching. Another respondent described the annual surveys conducted at Lethbridge University (Orr, 2017) focusing on learning technologies and the characteristics of physical learning spaces.

These two studies are similar to the current one, in that they involve asking students about their perceptions of how they learn and what they consider to be good learning experiences. However, they have important differences to the current study - they both employed an email questionnaire rather than focus groups, and they both focused on learning Technologies rather than students’ overall learning experiences.

In the second part of the environmental scan, an Internet search was conducted to determine the extent to which student focus group methods have been used at universities in Canada to study student perspectives and experiences of their learning needs. Two studies were found that used student focus groups to study the student experience, but both of these have only a minor focus on academic or course-based learning. The University of Toronto (2010) convened student focus groups to study the student experience, but instruction and courses were touched on only peripherally. The University of Ottawa ran monthly student focus groups about the undergraduate student experience as part of a university wide consultation process to initiate major changes across the institution (University of Ottawa, n.d.). One of the five topics of these focus groups was “teaching quality and relevance, and relations with professors” (Ibid).

Also of interest is a series of student focus groups convened by the London School of Economics (LSE, 2017) on a variety of topics including student learning, classroom and study facilities, and other topics related to the student experience. LSE posted an article
4. Review of Existing Data about SFU Students

4.1. SFU Undergraduate Student Surveys

The Institutional Research and Planning (IRP) department conducts an annual Undergraduate Student Survey (UGSS) to gauge the experience of being an undergraduate student at SFU. For the current study, the UGSS reports from 2013 to 2017 were reviewed for components relevant to teaching and learning. Appendix E provides a summary of the past five years of UGSS results that relate to teaching and learning. The highlights include:

- Undergraduate students are mostly satisfied with the quality of teaching at SFU, with 84% to 87% indicating satisfaction from the 2013 to 2017 surveys.
- About 45% of international and 40% of domestic students reported that they struggled because of their instructors’ English language skills.
- Students consistently request more interactive classes and more practical, hands-on and real-life experiences to enable them to transition into the workforce.
- Students want more engagement with analytical problem-solving and critical-thinking activities.
- In four of the five surveys (2013-2016), about 18% reported to have worked with a faculty member’s research team outside of coursework. The Fall 2017 preliminary report indicates only 11%.

4.2. Who are SFU Undergraduate Students?

Information was gathered about the demographics of SFU undergraduate students in order to provide a broader context for considering the learning needs of students. The following is taken mostly from the 2016 UGS report and the 2017/2018 enrollment report. Appendix F provides more details including full citations of the sources:

- SFU has about 30,000 undergraduate students, roughly half are part-time (<24 credits in a year), 54% are female, and the average age is 21.6 years old.
- 19.4% of undergraduates in Fall 2017 were visa students (international), and this has been gradually increasing. About 55% of international students are from China.
- 24% of undergraduates have participated in a co-op program, and this is gradually increasing.
• About 2% of undergraduates are registered with the Centre for Students with Disabilities, about 40% for mental health related disabilities.
• Students take an average of 5.5 years to complete a 4-year degree.
• Roughly 40% of undergraduates are transfer students from other colleges and universities – mostly from the lower mainland. Transfer students average 5 years older than students directly admitted into first year, and they achieve similar academic success. ([http://www.bccat.ca/pubs/ProfileReport_May2015.pdf](http://www.bccat.ca/pubs/ProfileReport_May2015.pdf))
• In 2015/2016, there were about 500 undergraduate Aboriginal students.

5. Student Focus Groups

5.1. Overview

The TLC partnered with the Student Engagement and Retention department at SFU’s Student Services to conduct student focus groups in September 2017. This department, which focuses on supporting student engagement across SFU, has run student-led focus groups during several recent semesters and has established procedures to recruit participants and facilitate the groups. They have also trained research assistants (RAs) to facilitate the focus groups, and transcribe and analyze the data. Student Engagement and Retention generously offered to include topics in their September 2017 focus groups that were specific to the TLC’s interests in teaching and learning.

5.2. Methods

Focus groups offered the opportunity for a deeper and more nuanced investigation of students’ perceptions of their learning needs than a survey questionnaire would allow. In a focus group, “participants influence each other, opinions change, and new insights emerge. Focus group participants learn from each other, and things learned can shape attitudes and opinions” (Morgan, Krueger & King, 1998 p. 69).

**Sampling and Interviews**

Student Engagement and Retention recruited participants for the focus groups by sending a web survey to all current, declared undergraduate students on June 22nd, 2017, and again on September 6, 2017. A total of 48 students responded to express interest in participating and 31 students actually participated.

Four focus group questions were developed, partially informed by a review of recent UGSS reports. The experience and insight provided by Student Engagement and Retention staff and RAs was particularly valuable to phrase the questions appropriately for a student audience. The RAs convened a pilot focus group with three students and, based on the results, the questions were refined and finalized as follows:
1. How do you learn at SFU? Think of your answer in terms of teaching and learning activities, and resources and support.

2. Think of one class where you learned the most. What did that instructor do to positively impact your learning? What did you do to positively impact your learning?

3. If you could change one thing about the following to improve your learning, what would it be and how would it make things better?
   - How your work is assessed
   - The style of lectures and tutorials

4. Do you feel connected to your peers/professor in your courses? Why or why not?

Eleven focus groups were run by RAs from Student Engagement and Retention from September 18th to 26th, 2017, and consisted of 60-90 minute sessions. Before groups were convened, participants were informed of the study purpose and procedures, and each participant provided informed consent. Students were given gift cards for participating. Facilitators used a detailed protocol and a note taker template, found in Appendices A and B. The sessions were recorded with both an audio recorder and observer notes, and verbatim transcripts were made.

**Focus Group Composition**

Eleven focus groups included 31 students with between one and five students per group. Note that three “groups” had only one participant because several students did not show up. The recruitment process used convenience sampling and was not intended to result in a representative sample of the SFU undergraduate population. For example, the participants did represent all eight academic faculties, but only one of the 31 participants (3%) declared themselves as an international student, whereas almost 20% of SFU undergraduates are international students. Note that all focus group participants had more than 30 credit hours. That is, they all had a minimum of a year of learning at SFU. Appendix C details the composition of the focus groups.

**Data Analysis**

Audio recordings, transcripts and observer notes were used for the data analysis. The unit of analysis was the statement – each time a participant speaks, the analysis identified the main idea, considered within the context of the conversation. The ideas were then categorized by thematic units (TU). “TU are global interpretative or explanatory sets of statements. Recurring systems of belief or explanations represent thematic units (Krippendorf, 2004, pp. 97-100).”

The transcripts were then analyzed using a modification of Giorgi’s (1985, 2012) descriptive phenomenological psychological method. This method starts by trying to
suspend any preconceived ideas about what would be seen or discovered in the data. Giorgi’s five steps for the analysis of narratives are (Ibid.):

1. Read all the transcripts to get a sense of the overall attitudes and perspectives.
2. Listen to the audio recordings while following on the transcripts, noting the various ideas or impressions. Voice inflections or emphasis could allow a better understanding than the transcripts alone.
3. Identify the central idea of each statement, being true to the participants’ words, and highlight the essential words and phrases with a highlight marker.
4. Categorize the highlighted text, first using a list of initial themes (see Appendix D) that were provided by an RA who had facilitated the focus groups. Synthesize the themes using the highlighted words and phrases to develop a revised and final list of themes.
5. Identify consistencies in the ideas identified across the groups of participants.

Validity

Strategies and factors that could have affected the validity of this study include:

- The group facilitators were students themselves, which seemed to result in a collegial, non-threatening environment for sharing of information. Had TLC staff facilitated the groups, the expectation of greater formality might have made the participants less forthcoming.
- The number of focus groups (eleven) is substantial enough to mitigate bias caused by “groupthink”. That is, focus groups can be prone to ignore minority opinions due to the pressure to conform, or due to time constraints (Morgan, Krueger & King, 1998). Because the number of groups was large enough, a diversity of opinions and experiences would still be gathered even if some groups suffered from this bias.
- The RAs facilitated the focus groups and identified the initial themes, while TLC staff completed the remaining data analysis. The process of staff handover could have resulted in some loss of information.
- During the focus group sessions, facilitators sometimes rephrased the questions. For example, one facilitator added the word information to the first question, resulting in, “How do you learn information at SFU?” This could have influenced participants to confine their answers to “information” only, whereas the original question intended to draw out all types of learning, including higher order experiences such as learning critical thinking, using problem solving, gaining research skills, etc.
- Because the focus groups were convened by the Student Engagement and Retention department, and ten of the fourteen questions were about non-academic engagement, it is possible that the results of the four teaching and learning questions were unduly influenced by the topic of engagement.
Nevertheless, community and connection are still important factors that influence learning; the first two of Chickering and Gamson’s (1987) seven principles of good teaching focus on these factors.

5.3. Description of Focus Group Data

Seven themes were derived from the focus group audio recordings and transcripts, as listed below. In addition, sample quotes are provided which offer more specific ideas about the student experience and help to explain why students perceive the issues to be important.

Themes from Focus Group Discussions

1. Applying knowledge and skills in a practical setting
   - Integrating ideas or theories with the outside world
   - Participating in real world research in the field, within or outside of a course
   - Hands-on learning to remember and understand
2. Developing community and connection for learning and support
   - Students value developing community in the classroom (that persists when the course ends)
     - Study groups within and outside of the classroom to understand what to study and how to study – encouraged by instructor or by peers
     - Being challenged to speak and contribute in class or small group discussion
   - Connection between instructor and student, caring about students, and fostering a safe environment
     - Instructors who get to know their students show they care about students’ learning
     - Treating students as equals promotes comfort and confidence, and builds connection
   - Collaboration with peers in small group settings (both lecture and tutorial). Pedagogies that connect students with their peers to help them understand the material more deeply, such as small groups that present to the class, critical thinking activities, debates, discussions, study groups
3. Large classes inhibit connection and learning
   - Large class sizes inhibit discussion with peers and with the instructor
   - No eye contact, students are not asked questions, students don’t speak
4. Use real-world examples, especially from instructor’s research, to make material relevant
   - Instructors sharing their own experiences and research
   - Using examples from the real world adds relevance to the theory

5. Assessments that promote learning and that are fair
   - Exams promote memorization rather than understanding
   - Student presentations and discussion-based assessments promote deeper understanding and critical thinking
   - Exams make more sense for material for sciences and technical subjects
   - Increase the variety of assessments to increase fairness
   - Make assessment criteria more transparent and provide better feedback

6. Improve training and teaching ability of TAs
   - Increase consistency across TAs within a course, including sections led by the instructor
   - Improve knowledge of subject and instructor expectations
   - Improve teaching skills

7. Better prepared instructors and better organized course material
   - Increase the connection between the lecture material and the supplemental work, readings, and tutorials
   - Use technology to organize course material; provide materials to students before the course starts
   - Make better use of technology, e.g. YouTube channel, lecture notes online, audio recordings of lectures

Sample Quotes from Transcripts that Demonstrate Each Theme
The quotes below have been chosen partly as a representative sample of each of the themes and also to provide some detail of the types of experiences that students have in courses and during their learning processes at SFU. This collection of quotes does not cover all of the subtopics of the themes, but rather provides examples of the depth and breadth of the themes.

1. Applying knowledge and skills in a practical setting
   - “There was a lot of practical, like going out there and actually talking to groups and I had never done that before. So, I think I learned a lot from that.”
   - “.... through application, we are able to kind of understand the theories and concepts we are being taught”
“... makes it so easy to remember stuff because you are doing stuff with your hands”
“The very hands-on engagement for that class was probably what made me do so well.”

2. Developing community and connection for learning and support

2.1 Students value developing community in the classroom (that persists when the course ends)

You feel you belong there because you can say something about it.”
“Having someone you can talk to outside of class really helps.”
“... when you are actually challenged to speak and think about what other people are saying and talk to them, it not only helps you to develop socially in terms of being able to interact with others better but also helps you to engage the content.”

2.2 Connection between instructor and student, caring about students, and fostering a safe environment

“I remember the first day of class, 5 minutes before it, he would come up to everyone--shake hands and engage with the students which was totally different from what most students would encounter.”
“I learned a lot just because he was really - he didn't talk down to us, he just saw us equals.”
“.... he really showed he cared about his students, he took the time to get to know them, and also took the time to answer everyone's questions.”
“I don't think there's a tendency for people to [connect with each other ]... just out of their own good will. So it depends on how much the prof emphasizes it.”
“when you have a teacher who genuinely cares about making sure that students are learning something they are passionate about and teaching things that are actually relevant with real life examples, those are the classes that I gain most”

2.3 Collaboration with peers in small group settings

“He had each of us in a small group of 3 or 4 teaching each module. So each group will present and you could be as creative as you wanted with that. So, and everyone had to read and prepare and have questions to compel you with. But he really made it about you know the group teaching groups. And he was kind of there just to stay and draw our attention. It went very well.”
“What I found is that explaining to people ideas or trying to convey what people are saying is helping me become better explaining or learning the theory.”

“…. used his ways to teach our students how to present the material or concept like in the text book. And then he asked us to teach other students in the rest of class. So he teaches us how to teach.”

“And I find if I’m trying to participate in discussions, I remember the material more and learn better that way, too.”

3. Large classes inhibit connection and learning

“…. a large lecture hall, 350 people. You don’t really get a chance to ask questions.”

“Classes that have tutorials I think let’s you connect with your classmates a little bit deeper. Let’s you examine the subject matter a bit deeper with your TAs.”

“Sometimes if you are in a big 400 class I mean how can you connect with anybody. That can be a little bit difficult. Whereas tutorials, there are maybe 20 of you at most.”

“…. has 500 people in it. I definitely feel not connected to many of my peers or my professor. My professor also doesn’t really make eye contact with us. She’s always looking at the screen. So that kind of puts a barrier. I think the tutorials are where I feel most connected to my peers and my TA.”

4. Use real-world examples, especially from instructor’s research, to make material relevant

“…. listen to him talk about his experiences, his MBA experiences with business concepts. And it was through that meaningful conversation, I really learned my best.”

“…. give you examples, or they’ll compare to something else that you can understand a lot better”

“I really appreciate when the teacher actually shares his stories, and is involved in what he is teaching and he gives us personal experiences”

“…. By pulling the story into the classroom and speak[ing] about their life”

5. Assessments that promote learning and that are fair

“I like the midterm exams because it breaks up the semester. Especially when you're talking about very specific, analytical material in science classes.”
“…. being able to memorize things is not going to assess how well you actually understand the subject matter”

“…. they assess more with writings so I can take a long time just to put down my thoughts. I can look things up. I can really I guess put my best effort in terms of what I’m thinking, what I’ve learned instead of just sitting in front of the multiple choices, kind of freaking me out.”

“…. before every class we have to answer and submit a bunch of questions. So it forces me to really focus on what I’m reading.”

“We should have a process of being able to understand how it was marked.”

“More written comments on essays or something would be really helpful”

6. Improve training and teaching ability of TAs

“I felt most cheated was when there was like an inequality in TA quality or ability…. the prof had one tutorial and the TA had like 4, and this TA was definitely like incapable of teaching.”

“I think there were 6 tutorials. So each [TA] had 2, and they were all run differently.”

“Even the TA couldn’t explain how we can do it. And the lectures did not help because the lectures even [did] not focus on that.”

“TAs in classes that they don’t know anything”

“I feel I learn more from [TAs] than the profs.”

“…. maybe the TA should have better conversation with our teachers. …. Maybe they can give us a specific example. And … ask some questions to students instead of just talking in front of class without any interaction with the student.”

7. Better prepared instructors and better organized course material

“…. learn the best when there’s sort of an online component to an in person classroom. So if the professors or instructors are able to use canvas effectively, give you due dates, give you additional resources”

“…. and it’s good to know what to expect. And having a recurring structured system. It’s just so beneficial because you are not trying to learn the system, you just try to learn the information.”

“I’d like to know what my readings are like long before the course starts so I can do something during my break.”

“…. for calculus, the best way was the prof’s YouTube channel. So it explains in detail all the notes we’ve gone over. And plus it gives you extra help.”
“those classes allow for audio recordings I find myself learning materials better just because I’m able to revisit the concept that I missed in lecture and reviewing it by myself”

5.4. Interpretation of Focus Group Data

The seven themes that came out of the focus group identify both the perceived areas of good practice and the areas that students believe to need improvement. The following discussion highlights what this might mean for teaching and learning at SFU.

**Experiential learning**

Students described how real-world learning experiences and experiential learning helped them to deepen their understanding of the theories and ideas they had gained in the classroom, through reading and studying for exams.

**Connection with peers and instructor**

Students said they believe that having a good connection with peers and the instructors helped them learn better. One participant shared a description of an instructor who introduced himself on the first day of class by coming in five minutes early and shaking hands with each student. In addition, the participants provided rich descriptions about how instructors reduced the power difference between themselves and the students, and the tangible impacts this had on student motivation, interest, and the quality of learning.

**Teaching skills and subject matter knowledge of TAs**

A few focus group participants expressed concern about the quality of instruction provided by TAs. They perceive an inconsistency in TA support across sections of the same course, and low overall quality of teaching and support. In addition, one student reported that sometimes the instructor leads one section while the TAs lead other sections resulting in a perceived difference in the quality of teaching across the sections.

Some students expressed a concern that some TAs have limited subject matter knowledge. Students suggested some improvements including: interactive discussions instead of lecturing, providing examples to explain a concept, coming around to groups to discuss problems instead of only sitting at their desk, and having the course instructor discuss expectations with the TA.

**Lectures**

Themes 3 and 4 are specifically about the quality of lectures, and aspects of the remaining five themes also relate to lectures. The experiences and concerns expressed in the focus groups could reflect the fact that a large amount of undergraduate learning at SFU is accomplished by participating in lectures. Although students perceive that increasing the quality of lectures would enhance their learning, one can imagine another
way to enhance their learning experience would be for instructors to rely more on other, more active, pedagogies.

**Assessments**
Students said that they want assessments, such as exams or assignments, to encourage deeper learning beyond just memorization. They also said that assessments must be fair, where fairness includes a sense that the grade reflects the amount of effort and/or learning, and also that the student fully understands why they received that grade.

**Amount of contact with course instructors**
Students reported that their primary contact with instructional staff is often with the TAs rather than with course instructors, especially in lower division courses. Students reported that there was sometimes little interaction between the instructor and students in classes taught in large lecture halls. Large courses are perceived to be a barrier to asking questions and connecting to the instructor and to peers. It is notable that lower division courses have a greater proportion of the TAs than upper division courses due to the typically larger size of lower division courses.

**Alignment of course components**
Several focus group participants reported that they perceived a misalignment of the course components, including readings that did not support the lecture material, and course material that did not align with the exam. It is difficult to discern the origin of these concerns, for example, is it poor organization on the instructors’ part, intentional lack of repetition of concepts across course components, the instructor encouraging students to learn from a variety of sources, or something else. It is notable that course designs are often complex and a student’s perception of misalignment could result from a multitude of factors.

**Sessional versus full-time faculty**
There was little mention of sessional instructors in the focus group discussions, even though a large proportion of SFU courses are led by sessional instructors. It is not clear from the focus group data if the students’ perceptions and experiences are equally applicable to sessional instructors and full-time faculty members.

6. **Comparison of Focus Group Results, UGSS Reports and Literature**
The information shared by students in the focus groups confirms much of what is already known about how students learn, and about the constraints and circumstances of learning in a higher educational institution in Canada and at SFU.
The following compares the seven focus group themes with the past five years of SFU’s UGSSs to identify areas of alignment and for ideas that are relevant to the mission of the TLC. The educational literature is also compared to the focus group themes.

1. **Applying knowledge and skills in a practical setting**

The UGSS reports from 2013 to 2017 show that students consistently ask for more practical, hands-on learning experiences, they want to learn through experience, and they expect to be able to apply the knowledge and methods they’ve gained.

Educational literature focuses on the importance of hands-on, experiential, and situated learning. Kolb (1984) provided a foundation for experiential learning theory with the cycle of learning through experience, and his ideas have been extensively developed by other experiential learning theorists and practitioners (Lave & Wenger, 1991; Mezirow, 1991, 2012; Wenger, 1999). Fink (2003) includes “application” as one of the six factors that are necessary for significant learning. Gagné, Briggs and Wager (1992) also describe that to "schedule a variety of occasions for practice" is required for learning intellectual skills and cognitive strategies.

2. **Developing community and connection for learning and support**

The UGSS reports have a limited coverage of this topic with respect to courses and instructors. However, some questions were asked in specific years. The 2014 UGSS asked students if their mental health and well-being impacts their academic success, and 91% agreed it did. Also, the 2016 UGSS asked students if their instructors create classroom experiences (including online courses) that positively impact their well-being, and 71% agreed. Individual comments include: increase interactions with instructors and TAs (UGSS, 2013) and a suggestion for more interaction with fellow students within and outside of the classroom (UGSS, 2014).

Educational literature supports this theme. For example, two of Chickering and Gamson’s (1987) seven principles for good practice in undergraduate education are, “developing reciprocity and cooperation among students” and, “encouraging contact between students and faculty”. Lave and Wenger (1991) believe that learning is situated within a social context where “socially shared cognition … results in the internalization of knowledge by individuals and developing an identity as a knowledgably skillful member of the community.” In a study of memorable teachers, undergraduate students found that the most memorable are those that make connections and build trust with students (Koehler, Newby & Besser, 2017). Gilbert and Driscoll (2002) identified the learning conditions that promote knowledge building in collaborative learning communities. They show that students became conscious of their own roles within the group when they contribute to the efforts of the class. In a Memorial University study (Delaney, 2010), students identified characteristics of an effective teacher to be: communicative, engaging, respectful and approachable. Also, the University of Guelph provost’s white
paper (2005) includes “cultivating a sense of community” as one of the ten suggestions for enhancing undergraduate education.

3. **Large classes inhibit connection and learning**

Large classes create a challenge for universities and numerous reports are devoted to this subject, especially about mitigating the challenges of interaction and active learning in a large lecture hall (Bligh, 2000; Gedalof, 2007; Morton, 2009). Bligh (2000) discusses a variety of approaches to make lectures more interactive and promote various learning objectives, for example, to gain students’ attention, motivate learning, teach critical thinking and teach attitudes. Bligh (Ibid.) also concedes that interaction between students, and between instructors and students, is more challenging when a class is large. Morton (2009) suggests several methods to maintain the connection and sense of community in large classes including small group discussions, think-pair-share, and use of technology such as mini-tests using audience response systems. So central are the issues of large classes across Canada, that the very first Green Guide produced by the Society for Teaching and Learning in Higher Education (STLHE) was on this topic (Gedalof, 2007).

4. **Use real-world examples, especially from instructor’s research, to make material relevant**

The 2013 UGSS asked students to rank the most important attributes of instructors from a list of seven attributes. They ranked, “explains concepts with real-world examples” as the 3rd most important, after “clearly communicates course concepts”, and “connects all course components (e.g. connects lectures and tutorials/labs with readings and assignments)”. This question was not included in the UGSSs in 2014 to 2017.

Providing examples to help students learn concepts is recommended by numerous educational scholars (Biggs & Tang, 2011; Ramsden, 2003; Fink, 2003).

5. **Assessments that promote learning and that are fair**

The UGSSs did not ask questions about this topic directly, but in the 2013 survey question about the most important attribute of instructors, *grading fairness* was citing in the “other” category by 13 students.

There are at least two dimensions to this theme – first, the idea that assessments should promote learning and second that they should be fair. One approach addressing both of these is *timely formative feedback*, which is discussed extensively in the literature (Ramsden, 2003; Chickering & Gamson, 1987; Biggs and Tang, 2011). Other literature focuses on *authentic assessment* which advocates for assessing accomplishments that are meaningful and worthwhile in the real world, not just within a classroom (Janesick, 2006). Examples of authentic assessment include research, essays, role-plays, demonstrations, and community presentations (Ibid.).

6. **Improve training and teaching ability of TAs**
Like the focus group results, the UGSS reports from 2013 to 2016 show a concern about the teaching abilities and subject matter knowledge of TAs. The UGSS participants provided only very general comments:

- “Use a more thorough process for hiring TAs”
- “Hire instructors and TAs with adequate English and communications skills”

Focus group participants also provided numerous general comments about the teaching abilities of TAs. Though there is a plethora of literature about faculty development and a smaller amount, though still considerable, about the development of TAs, the focus group results are not specific enough to determine what parts of this literature would be relevant.

7. **Better prepared instructors and better organized course material**

The 2013 UGSS included a question on students’ opinions about instructor attributes. Students rated the following as the second most important attribute of an instructor out of a list of seven given attributes: “Connects all course components (e.g. connects lectures and tutorials/labs with readings and assignments)”. Only “Clearly communicates course concepts” was ranked higher. This question was not asked in the UGSSs from 2014 to 2017.

Though it is not clear how the UGSS respondents interpreted the word, “connects”, it could refer to aspects of how a course is organized. Some focus group participants suggested that instructors use the Canvas course management system to improve the organization of course material and to help both the instructor and students to schedule and track learning activities and assignments. From the literature, a multitude of authors have discussed the importance of well-organized lectures and course materials. The theory of constructive alignment suggests that learning outcomes must be aligned with the learning activities, which in turn must be aligned with the assessments (Biggs & Tang, 2011). As part of their theory of instructional design, Gagné, Briggs & Wager (1992) suggest that instructors should intentionally sequence the course material, and select and use learning technologies to help organize course material for their students.

7. **Discussion and Recommendations**

*Consider focus group themes in TLC services, supports and programs*

The seven themes drawn from the focus groups point to some areas in which the TLC could influence the learning experience of SFU students. These themes are consistent with both the student perceptions reported in the UGSSs and with educational literature. The TLC could consider focusing on the following areas of pedagogy and educational development:
Teaching and Learning Centre

- Building community in the classroom and inspiring students to study collaboratively outside of the classroom
- Facilitating engaged, collaborative discussions
- Designing and supporting effective groups for learning, for example teaching students how to make a group function more effectively
- Learning activities and pedagogies that develop critical thinking
- Student preference for real world practical skills
- Assessments that both measure and enhance learning, especially alternatives to multiple choice exams
- Alignment of course components with each other
- Using learning technologies (especially Canvas) to organize course components, learning materials and the scheduling of learning activities

Supporting Teaching Assistants
Concerns were expressed in the focus groups and the UGSSs about the quality of support provided to students by TAs, and the amount of contact that students have with TAs compared to course instructors, particularly in lower division courses. TLC could learn more about the needs, concerns and circumstances of TAs through discussions with the Teaching Support Staff Union (TSSU), and the TLC could share the results of the current study with the TSSU.

Two main approaches are possible, potentially in collaboration of TSSU:

- TLC could support TAs directly through various programs and services, for example, customized TA inductions and TA/TM day.
- TLC could provide support, materials and advice to course instructors about how to train and support their TAs.

As a first step, TLC’s current TA workshops could be reviewed to ensure they are providing the necessary skills and knowledge that TAs want, that course instructors expect, and that students require.

Advice from students on TLC educational development services and supports
Consultation with students on a regular basis could help the TLC stay current about the teaching and learning issues that are of concern to students. This could be accomplished by, for example, an advisory group with student representation, commitment to an ongoing co-op position at TLC, regular work-study projects, periodic attendance at Simon Fraser Student Society (SFSS) meetings, etc.

Lectures
It is difficult to estimate the amount of lecturing being done at SFU, compared to other instructional methods, but we know it is considerable. Numerous TLC services and
programs support the enhancement of lecturing, including workshops on presentation skills, one-on-one consultations, teaching observations, facilitation of peer teaching circles, etc. Most of these services and programs (the exception is one-on-one consultations) are provided without consideration of whether lecturing is the most effective instructional method to achieve the aims of the course or session. Therefore, TLC could review the current supports, services and programs for the enhancement of presentation skills to ensure that we are, in tandem, helping instructors select the most appropriate instructional strategies.

TLC's sphere of influence
Faculty members have influence over only a portion of the factors that help students learn. Likewise, the degree of influence of the TLC on the quality of instruction and the quality of learning has limitations. For example, factors that students discuss each year in the UGSSs are the need to take paid work, and the difficulties registering for their preferred courses; these both potentially have a negative impact on students’ educational experiences at SFU. Nonetheless, TLC can do a great deal to improve student learning by working with faculty members, sessional instructors, TAs and students themselves.

Sharing student stories with faculty
Sharing stories from the focus groups could help instructional staff gain a better understanding of the experiences and perceptions of the SFU learner. Potential formats could include a one-page handout, a summary of focus group results on the TLC website, or a faculty/student event such as a lunch and learn.

8. Conclusions and Next Steps

Knowledge mobilization
The final report will be shared with key stakeholders within and outside of the TLC, in conjunction with the TLC Communications Officer. This could take the form of simply sharing this report, sharing a summary and/or highlights of this report, a lunch and learn session or other activities.

Comparison of results with faculty needs assessment
An opportunity to learn more could arise from comparing the findings of this study with those of the TLC Faculty Needs Assessment study. This could inform TLC’s services and practices, and provide further suggestions about how educational development could be enhanced at SFU.
Collaborate in the annual UGSS
The TLC could work with IRP to provide one or two questions about teaching and
learning for the annual UGSS. The results of the current study could help inform this
collaboration as we consider what we really want to learn from students.

9. References
Berkshire, UK: SRHE & Open University Press.
of Effective Teaching in Higher Education*. St. John’s, NL: Distance Education and
Learning Technologies.
Giorgi, A. (Ed.) (1985). *Phenomenology and psychological research*. Pittsburgh, PA:
Duquesne University Press.
Phenomenological Psychology*. Vol.43(1), pp.3-12.
student narratives to explore memorable teachers. *Educational Review*, 69:2, pp.158-
180.

London School of Economics (May 9, 2017). *Hearing student views through focus groups: Creating spaces for dialogue*. http://blogs.lse.ac.uk/education/2017/05/09/hearing-student-views-through-focus-groups-creating-spaces-for-dialogue/


University of Toronto. (July, 2010). *In Their Own Words: Understanding the undergraduate student experience at the University of Toronto*. http://www.viceprovoststudents.utoronto.ca/intheirownwords.htm


Appendices

Appendix A  Focus Group Protocol Used by Research Assistants
Appendix B  Focus Group Observer Note Taker Template
Appendix C  Participant Composition of Focus Groups
Appendix D  Initial Themes: First Impressions of the Focus Group Data
Appendix E  SFU Undergraduate Student Surveys 2013-2017 – Summary of Items Related to Teaching and Learning
Appendix F  Who Are SFU Students?
Appendix A: Focus Group Protocol Used by Research Assistants

ENGAGEMENT FOCUS GROUPS GUIDE

Introduction (5 min)

Thank you all for taking the time to participate in this discussion/focus group. My name is (moderator), and this is (note-taker). We are research assistants for Student Engagement and Retention and a student at SFU and I’m going to lead our discussion today.

I will be asking you questions and then encouraging and moderating our discussion. This discussion is completely voluntary, and participation will not affect your standing at SFU in any capacity.

The reason we are conducting focus groups is to get a better understanding of students’ perspectives, motivations, and key drivers for getting involved. We hope to learn things that SFU can use to improve student engagement and campus community, and we look forward to hearing about your personal experience with engagement at SFU (or similar rendition).

Consent

This focus group will be recorded and transcribed by (note-taker), who will also be taking notes during the session. We will record our discussion so that we can make sure to capture the thoughts, opinions, and ideas we hear from the group.

The information you give us today is confidential and anonymous, we will not share nor associate your personal information with anything you say in the focus group. I would also like to ask everyone to respect each other’s privacy and confidentiality by not sharing this information outside this room. We stress confidentiality because we hope for an open, rich discussion and we want all of you to feel free to comment on each other’s remarks.

It is also important that you have signed the consent form before we continue any further. If you have not signed the consent form can you indicate that now? (Bring consent forms)

Ground rules

To allow our conversation to flow more freely, I’d like to quickly go over some ground rules:
• This is an open discussion and you are free to speak at any time, but try to only speak one at a time as it’s easier to record.
• If you have an idea, opinion, or question then please share it with the group and avoid side conversations.
• There are no right or wrong answers. You may have different opinions and disagreeing with a group member’s opinion is completely acceptable, just remember to be respectful at all times.
• If we could turn off or silence our cellphones it would be much appreciated.

The focus group will last about 1 hour. Feel free to step outside if you need a break and help yourselves to refreshments (there will be beverages and pizza).

Any questions before we begin?

Opening (1-2 min)

Before we start, I’d like to know a little about each of you. Please tell me your name, year, and Faculty.

Introductory Activity (6-8 min)

Let’s start the discussion by talking about what an ‘engaged student’ looks like. Instructions: Using flip charts and working in pairs have participants define who an engaged student is and what that looks like.

Key Questions (45 min)

Student Identities and Priorities (5 min)

1. What are your main goals and priorities as a student, both at SFU and outside of SFU?

Motivation and Engagement (10 min)

2. What motivated you to attend SFU? What has motivated you to continue at SFU?
3. What motivates you to participate in engagement/co-curricular opportunities?

Engagement at SFU: Pre-arrival Expectations and Post-arrival Experiences (10 min)

4. Before coming to SFU, what did you expect student life to be like?
5. Were your expectations of engagement exceeded, met, or not met? How?
6. Reflecting back on your first year, what kind of additional information or support would you want from SFU after your first term?
a. How would you like to receive this support (online, in person, an event, buddy system, etc.)

**Engagement Initiatives on Campus** (10 min)

7. What is the one engagement initiative that SFU could create or improve upon to serve you better? (i.e., a service, program, event, activity)
   a. How would you like to learn/be communicated about this initiative?

8. Are there any current engagement initiatives that stand out to you either positively or negatively?

9. What is your ideal role in being involved on campus?

**Belonging and Community** (10 min)

10. Do you feel that you belong to the SFU community, your faculty, and your department? (Ask students to identify faculty/department)
   a. Why?
   b. Is SFU your primary community? (Optional)

11. What can SFU do to improve the sense of community and engagement on campus? (Optional)

**Closing**

That concludes our focus group. Thanks for coming today and participating in this student consultation process. Your comments and views will help inform how we can better support SFU’s efforts to increase engagement. I thank you for your time.

**Materials and Supplies**

- Sign-in sheet
- Consent forms
- Markers and flipchart paper
- Focus group discussion guide
- Recording device (laptop or audio recorder)
- Laptop for note-taking
- Refreshments
Appendix B: Focus Group Observer Note Taker Template

### Note Taker Template

<table>
<thead>
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<th>Number</th>
<th>Name</th>
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Undergraduate Students’ Perceptions of their Learning Experiences at SFU
Appendix C: Participant Composition of Focus Groups

Demographic Characteristics of Participants

<table>
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<th>Table 2: Faculty of Participants</th>
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<tbody>
<tr>
<td>Faculty</td>
</tr>
<tr>
<td>Faculty of Arts and Social Sciences</td>
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<td>Faculty of Applied Sciences</td>
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<tr>
<td>Faculty of Environment</td>
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<tr>
<td>Faculty of Communication, Art and Technology</td>
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<td>Faculty of Business</td>
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<td>Faculty of Health Sciences</td>
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<td>Faculty of Science</td>
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<td>Faculty of Education</td>
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<td><strong>Totals</strong></td>
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<td>0-30</td>
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<td>31-60</td>
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<td>61-90</td>
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<tr>
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<tr>
<td>120+</td>
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<tr>
<td><strong>Totals</strong></td>
</tr>
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</table>

30 of the focus group participants were domestic students, and 1 student indicated that they were an international student.
Table 1: Student Engagement Focus Group Attendance

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<td>4</td>
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<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Sept 19, 2017 10:00 AM</td>
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<td>1</td>
</tr>
<tr>
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<td>1</td>
</tr>
<tr>
<td>Sept 20, 2017 11:30 AM</td>
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<td>2</td>
</tr>
<tr>
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<td>5</td>
</tr>
<tr>
<td>Sept 21, 2017, 12:30 PM a</td>
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<td>2</td>
</tr>
<tr>
<td>Sept 21, 2017, 12:30 PM b</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Sept 21, 2017, 2:00 PM</td>
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<tr>
<td>Sept 22, 2017, 10:30 AM</td>
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</tr>
<tr>
<td>Sept 26, 2017, 10:30 AM</td>
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<tr>
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</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>48</strong></td>
<td><strong>31</strong></td>
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</tbody>
</table>
Appendix D: Initial Themes: First Impressions of the Focus Group Data

After facilitating the focus groups and coding the transcripts, primary themes were noted by the Research Assistant from Student Engagement and Retention.

How Students Learn:

- Applying knowledge and skills in a practical setting
- Using previously developed skills to study and be consistent with school work
- Collaboration with peers in small group settings (both lecture and tutorial): Increase the amount of discussions, presentations and critical thinking activities
- Largely through online components to in-person classrooms
- Students fare better in small classes than large classes
- Students value developing community in the classroom (that persists when the course ends)
- Engaging professors often use real-world examples and make material relevant for the students.

Improvements to Assessment and Teaching:

- Increase the number of professors who are engaging and facilitate safe environments that foster collaborative discussion.
- Fewer tests and exams for the arts (students perceive exams to not be reflective of learning)
- Increase the variety of assessments
- Teaching Assistants (TAs)
  - Increase consistency between TAs
  - Increase support from TAs for learning
  - Improve training and teaching ability of TAs
- Increase the connection between the lecture material and the supplemental work, readings, and tutorials.
- Professors are more engaged with the material than the students sometimes
Appendix E: SFU Undergraduate Student Surveys 2013-2017 – Summary of Items Related to Teaching and Learning

Fall 2017 Preliminary Report

- 84% of respondents were satisfied with the overall quality of teaching at SFU (2% less than last year).
- 81% of respondents said that completing their teaching and course evaluations would be more important to them if the instructors used the results to shape their teaching practices.
- 11% of the respondents reported working within a faculty member’s research team outside of coursework.
- 75% thought it was important to be involved in co-op, internship or practicum activities. 24% of all respondents have participated in co-op.

Fall 2016

- 86% of respondents were satisfied with the overall quality of teaching at SFU (1% more than last year).
- Top three qualities/skills/experiences that an SFU graduate should have:
  - Critical thinking skills (42%)
  - Ability to apply knowledge/methods learned (38%)
  - Solid foundation in their specific academic discipline (32%)
- 18% reported that they have worked within a faculty member’s research team outside of coursework.
- About 45% of international and ~40% of domestic students reported that they struggled because of their instructor’s English language skills.
- If SFU could do one thing to improve your experience here, what would it be? Instructors and TAs as well as Program/Course Curriculum are students’ 8th and 9th concerns compared to Community, Facilities, Course Scheduling, Tuition, Transportation, Services, and Policy Decisions, and Food.

Fall 2015

- 85% of respondents were satisfied with the overall quality of teaching at SFU (2% less than last year). This varies across the faculties: 90% satisfaction in Education and 77% in Applied Sciences.
- 67% think that SFU should encourage the use of more digital resources.
- 18% reported that they have worked within a faculty member’s research team outside of coursework.
- About 45% of international and 42% of domestic students reported that they struggled because of their instructor’s English language skills.
Course availability has been an ongoing issue at SFU. 56% of graduates indicated that they have encountered a course availability problem during their degree (versus 36% at UBC and 34% at UVic).

If SFU could do one thing to improve your experience here, what would it be? Instructors and TAs as well as Program/Course Curriculum and Format have been students 9th and 10th concerns compared to Community, Facilities, TSSU Strike, Course availability and scheduling, Tuition, Transportation, Services, and Food.

Fall 2014

- 87% of respondents were satisfied with the overall quality of teaching at SFU (2% more than last year).
- 19% reported that they have worked within a faculty member’s research team outside of coursework.
- The two most important motivations for attending university are to get a good job and train for a specific career.
- Top three qualities/skills/experiences that an SFU graduate should have:
  - Critical thinking skills (45%)
  - Ability to apply knowledge/methods learned (37%)
  - Learning through experience (28%)

- About 50% of international and 45% of domestic students reported that they struggled because of their instructor’s English language skills.
- Course availability has been an ongoing issue at SFU. 56% of students indicated that they have encountered a course availability problem during their degree (versus 36% at UBC and 34% at UVic).
- If SFU could do one thing to improve your experience here, what would it be? Program/Course Curriculum and Format as well as Instructors and TAs have been students 6th and 7th concerns compared to Community, Facilities, Course availability, Services, Transportation, University administration, Tuition, and Food.

Fall 2013

- 85% of respondents were satisfied with the overall quality of teaching at SFU.
- Students indicated that the two most important qualities of a course instructor are “clearly communicates course content” and “connects all course components”.
- 16% reported that they have worked within a faculty member’s research team outside of coursework.
- Students learning outcomes:
  - Critical thinking skills
  - Solid foundation in their specific academic discipline
  - Ability to apply knowledge/methods learned
  - Learning through experience
- Being an engaged citizen with a sense of social responsibility
  - About 40% of respondents said that they struggle in the class because of their instructors’ English language skills, and 38% struggle due to their TA’s English language skills.
  - If SFU could do one thing to improve your experience here, what would it be? Course availability as well as Instructors and TAs have been students’ 5th and 8th concerns compared to community, facilities, services, transportation, university administration, tuition, and food.
Appendix F: Who are SFU Students?

In 2017/2018 29,800 unique individuals enrolled as undergraduates at SFU. Of these:
- 53% are full-time (24 or more credits per year) and 47% are part-time.
- Roughly 54% are women.
- 19.4% are international students, and this is gradually increasing.
- Average age is 21, with 10% older than 25 years.
- It takes 5.5 years to complete an undergraduate degree, and this is gradually increasing.

Of 5,500 unique graduate students enrolled in 2017/2018:
- 57% are women.
- 28.5% are international students.

Number of Students by Faculty

- Applied Sciences: 3,985, 13%
- Arts and Social Sciences: 3,803, 13%
- Beedie School of Business: 11,167, 37%
- Comm., Art and Tech.: 1,416, 5%
- Education: 1,409, 4%
- Environment: 1,497, 5%
- Health Sciences: 3,012, 10%
- Science: 2,641, 13%
Co-operative Education

In the academic year 2016/2017, 3,556 co-op placements were awarded. Note that a placement is a four-month period.

International Students

At SFU 6,008 or 20% of undergraduates are international (visa) students, coming from 137 countries.

- 55% are from China, which proportionally has been steady over the past 5 years.
- 6.2% are from India, which has tripled over the past 5 years.

Countries of Citizenship of Undergraduate International Students in Fall 2017
What Are SFU Students Seeking?

When asked about what they wanted to gain from attending the SFU, the number one response was to get a good job for both international and domestic students. For international students, gaining new perspectives on the world and experiencing life away from home were common responses.

The data on pages 1, 2 and 3 is from: https://www.sfu.ca/content/dam/sfu/irp/enrollment/EnrollmentDashboard/documents/ug.enrol.report.2017.2018.pdf
Student Employment

Over half, 55%, of undergraduate students are employed. Among these, 9% work 30 hours or more per week, 65% work 20-29 hours per week and 26% work 10-19 hours a week.

Data on pages 4 & 5 is from UGSS: http://www.sfu.ca/content/dam/sfu/irp/surveys/ugss/ugss2016report.pdf
**Interruption of Studies**

The fall 2016 UGSS survey asked students what has delayed their credential completion. A significant reason is course availability issues including courses that are full, schedule conflicts and courses not offered.
Aboriginal Students by Faculty and Age

In 2015/2016, 494 Aboriginal undergraduate students were enrolled, of which 65% were women. The average age of Aboriginal undergraduate students was 24.5, with 33% who are 25 years or older.

Aboriginal Enrolment by Faculty

- Arts and Social Science: 48%
- Science: 10%
- Applied Sciences: 6%
- Health Science: 7%
- Environment: 8%
- Education: 8%
- Communication: 9%
- Business: 4%
- Applied Sciences: 6%
- Arts and Social Science: 48%
- Science: 10%
- Health Science: 7%
- Environment: 8%
- Education: 8%
- Communication: 9%
- Business: 4%
Aboriginal Admission Pathways

Admission pathways for Aboriginal students are similar to the SFU U/G population, except for the category of “other” which is considerably larger for Aboriginal students.

Basis of Admission

Other
B.C. grade 12
B.C. college transfer
University transfer
Non B.C. grade 12
Degree holder
Mature
Tech program

0 20 40 60 80 100 120 140 160

The data in the Aboriginal section is from: https://www.sfu.ca/content/sfu/irp/students/aboriginal_fact_sheet/_jcr_content/main_content/download_1/file_res/SFU.Aboriginal.2015.2016.public.fact.sheet.pdf